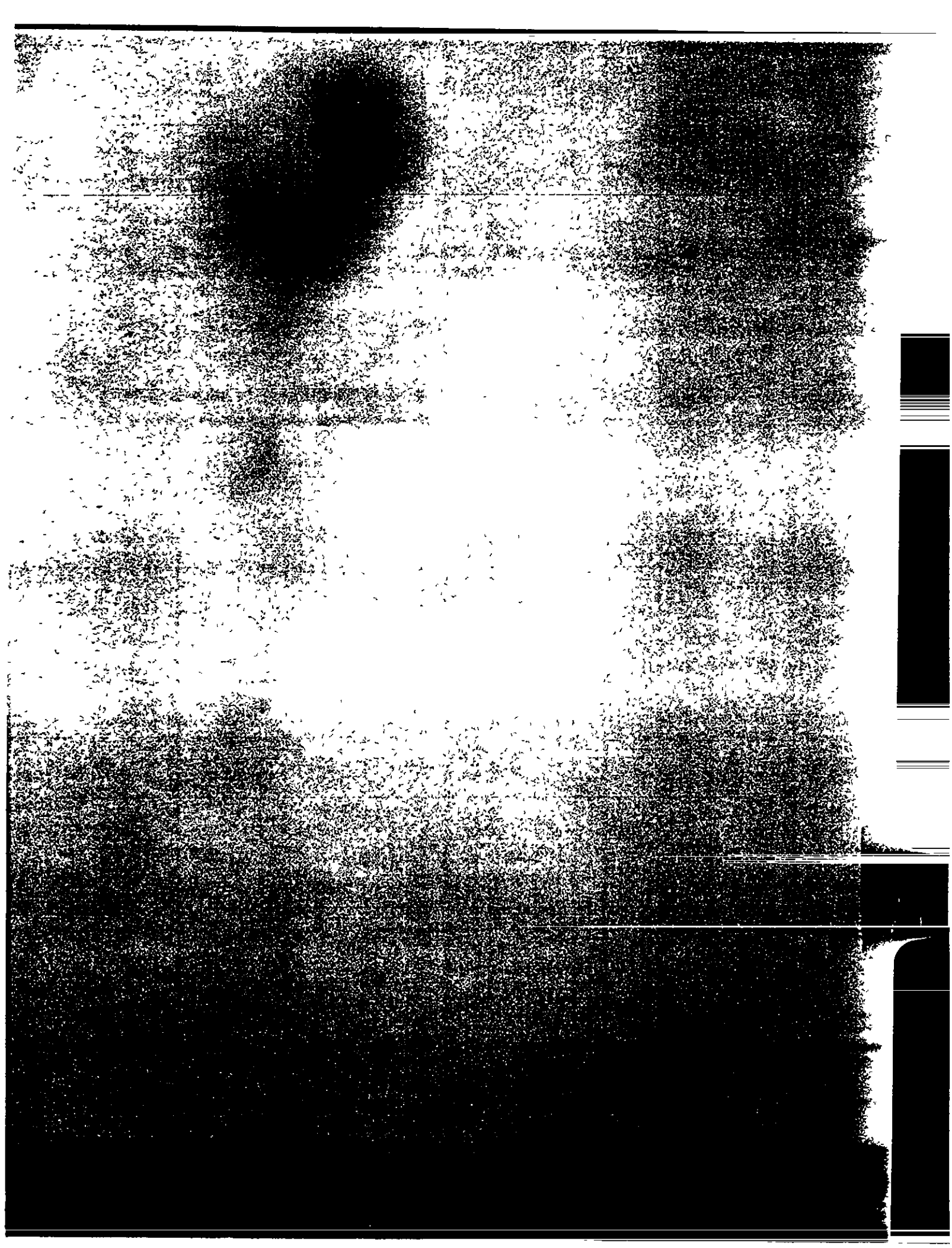
The basic question that has to be asked is what is the role of the cheerleader? Is cheering an activity that leads the spectators in cheers or is it a sport? If the answer is to entertain the crowd and to be in competition with other cheerleading squads, then there must be safety guidelines initiated. Following are a list of sample guidelines that may help prevent cheerleading injuries:

1. Cheerleaders should have medical examinations before they are allowed to participate. Included would be a complete medical history.
2. Cheerleaders should be trained by a qualified coach with training in gymnastics and **partner stunting**. This person should also be trained in the proper methods for spotting and other safety factors.
3. Cheerleaders should be exposed to proper conditioning programs and trained in proper spotting techniques.
4. Cheerleaders should receive proper training before attempting gymnastic type stunts and should not attempt stunts they are not capable of completing. A qualification system demonstrating mastery of stunts is recommended.
5. Coaches should supervise all practice sessions in a safe facility.
6. Mini-trampolines and flips or falls off of pyramids and shoulders should be prohibited.
7. Pyramids over two high should not be performed. Two high pyramids should not be performed without mats and other safety precautions.
8. If it is not possible to have a physician or athletic trainer at games and practice sessions, emergency procedures must be provided. The emergency procedure should be in writing and available to staff and athletes.
9. There should be continued research concerning safety in cheerleading.
10. When a cheerleader has experienced or shown signs of head trauma (loss of consciousness, visual disturbances, headache, inability to walk correctly, obvious disorientation, memory loss) she/he should receive immediate medical attention and should not be allowed to practice or cheer without permission from the proper medical authorities.
11. Cheerleading coaches should have some type of safety certification. The American Association of Cheerleading Coaches and Advisors offers this certification.

The Michigan High School Athletic Association is the second state to recognize cheerleading as a sport. West Virginia incorporated cheerleading into athletics seven years ago. Michigan will have a committee define the sport and will have a state Cheerleading Tournament. Rules and regulations will now govern cheerleading and this is an important move toward a safer activity. Also, the American Association of Cheerleading Coaches and Advisors Safety Certification Program has been implemented and over 500 coaches have participated in safety certification programs. The state of Vermont has adopted the safety certification program as their standard of care and the following NCAA Athletic Conferences have also adopted the program: the Big Ten, Southwest, Southeast and the Western Athletic Conferences.

According to the National Federation of State High School Associations, the primary purpose of spirit groups(cheerleaders) is to serve as support groups for the interscholastic athletic programs within the school. In January of 1993, 18 rules revisions were adopted for spirit groups. One of the major rules prohibits tumbling over, under, or through anything (people or equipment). All of the other rules were adopted to enhance the safety of the participants. Information concerning these new rules is available from Susan True, assistant director of the National Federation and editor of the high school spirit rules.

Last updated: September 8, 1999



INJURIES IN LITTLE LEAGUE BASEBALL – 1987-1996

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ABSTRACT

Baseball has been cited as a sport with a high number of injuries and the Consumer Product Safety Commission stated there were 88 deaths in baseball from 1973 to 1995. Af the present time there are concerns associated with youth baseball and the impact-reduced ball, batter chest protectors, facemasks, and safety bases. Ten years of data from Little League Baseball, Inc. actually show that youth baseball is essentially a very safe activity.

INJURIES IN LITTLE LEAGUE BASEBALL

1987 - 1996

Baseball is the second most commonly played team sport in the country (after basketball) with approximately 8.6 million participants aged six to 17 participating each year.[1] In 1995 there were over four million boys and girls in organized amateur youth baseball leagues, with Little League Baseball, Inc. (LLB) comprising over 50% of these.

Baseball has been cited as a sport with a high number of injuries. The Consumer Product Safety Commission (CPSC) stated that there were 88 deaths in baseball from 1973 to 1995, more than any other sport.[2] Sixty-eight of the deaths were caused by ball impact and thirteen were caused by bat impact..

The purpose of this paper is to describe the incidence of injuries to Little League Baseball players aged five to 12 years for a ten year period of time - 1987 through 1996. There are some controversial areas associated with youth baseball and equipment. These areas include the impact-reduced ball, batter chest protectors, facemasks, and safety bases. This paper places the injuries that this equipment is supposed to help prevent in the context of all injuries in LLB.

METHODS

Little League Baseball, Inc. is located in Williamsport, Pennsylvania and represents players in that specific organization. There are many other youth baseball organizations, but there is only one Little League Baseball, Inc. This organization has been collecting insurance data for many years from all of their leagues across the United States

(approximately 6200 leagues), and that database was used for the current analysis. Little League Baseball programs are required by Little League regulation to obtain accident insurance coverage for all players, managers, coaches, and umpires. The accident insurance plan is made available to all Little League programs and is administered by Little League Baseball Incorporated at its international headquarters in Williamsport, Pennsylvania. The policy provides insurance benefits up to $100,000 for treatment rendered within 52 weeks from the date of the accident on an excess basis. The excess provision means that the plan only provides benefits for treatment that is not covered in full by the parents' or claimants' personal or group insurance plan. The vast majority of affiliate leagues (97%) participate in the insurance option. Approximately one-third of all the claims are made on a primary basis, meaning that there is no other insurance in effect to pay the bills.

All injuries not directly related to baseball were deleted from the insurance database. Analysis was also restricted to players' aged 5 – 12 since this is the age group predominantly involved in Little League Baseball. Denominator data on the participants is also collected by LLB on an annual basis.

RESULTS

Little League baseball, Inc. had an average of 1,722,121 male and female participants age 5 - 12 for the ten-year period from 1987 through 1996 for a total of 17,221,210 athlete years of follow-up. There were 29,038 injuries (including warm-up and batting circle injuries) and an injury rate of 1.69 injuries per 1,000 participants per season in the age group 5 – 12 years. The greatest number of injuries was associated with the runner. Runners accounted for 6,137 injuries or 21.1 percent of all injuries. Infielders

had the greatest number of injuries for defensive positions accounting for 6,012 injuries or 20.7 percent of all injuries. Infielders were followed by the batter with 5,567 injuries. It was interesting to note that the runner and batter were associated with 40.3 percent of all injuries. The outfielders accounted for 14.2 percent of the total injuries and were second to infielders when looking at defensive positions. Catchers were associated with 3649 or 12.6 percent of the total injuries, and they were followed by the pitcher with 2080 injuries or 7.2 percent of the total injuries. It was also interesting to note that warm-up activities and being in the on deck circle accounted for 5.1 percent of the total injuries. Little League Baseball eliminated the on deck circle for the Little League Baseball Division in 1996. Senior and Big League Divisions continue to use an on-deck circle.

POSITION AT TIME OF INJURY

Three quarters of the injuries to runners (73.7%) took place in games. The body part most injured by the runner was the ankle, followed by the arm-wrist-elbow and the knee. If the ankle and knee injuries were combined they would have accounted for approximately 40% of the injuries. Sliding is associated with a high percentage of lower leg injuries and nearly two-thirds of injuries to the base runner resulted from sliding. (Table 1) There were also 559 facial injuries and 180 head and neck injuries to the runner. Fracture, sprains, and contusions accounted for 85% of the injuries to runners. Forty percent of the injuries were fractures, 30% sprains, and 14% contusions.

Infielders received a majority (56%) of their injuries in games. The face was the most injured body part and accounted for 2253 or 37% of the injuries to infielders. Teeth were the second most injured body part followed by the hand-fingers, arm-wrist-elbow, knee-

ankle, and head-neck. Fractures accounted for one-third of the injuries to infielders, closely followed by contusions. Dental injuries were third on the list followed by lacerations and sprains. Concussions were associated with 1.2% of the injuries to infielders. The batted ball accounted for over one-third of the total injuries, being struck by a thrown ball was second, and colliding was third. (Table 1)

Batters received a majority of their injuries (72%) in games from pitched balls. (Table 1) The body part most injured was the hand-finger, followed by the face, arm-wrist-elbow, knee-ankle, head-neck, chest, and leg. The three leading injury types for batters were contusions (46.0%), fractures (29.7%), and sprains (6.4%).

In contrast to the other positions, outfielders received more injuries during practice than in games. Facial injuries (eye, face, mouth, nose, and lips) accounted for 40.7% of the injuries. Teeth injuries were the next most injured body part accounting for 18.4% of the total injuries. Facial injuries combined with teeth injuries accounted for 59.1 % of injuries to outfielders. Fractures are the most prevalent injury to outfielders accounting for 30.3%. Fractures were followed by contusions (25.6), dental injuries (18.5), lacerations (11.3), sprains (6.9), and concussions (1.5%). There was also one fatal injury among the outfield group. The baseball was in some way associated with two-thirds of the injuries to outfielders. (Table 1)

Catchers were fifth on the most injured position list with 3,649 injuries. Two-thirds of the injuries to catchers took place in games. The body part most injured for catchers was the hand-fingers with 36.0% of the total injuries. The second most injured body part was the

arm-wrist-elbow (16.1) followed by the face (14.7%), knee-ankle (9.5%), teeth (6.7%), and head-neck (5.6%). As was true for outfielders, infielders, and runners, fractures were the type injury most associated with the catcher (35.4%), followed by contusions (32.0%), sprains (13.8%), dental (6.8%), lacerations (5.0%), and concussions (1.0). There was also one fatal injury to catchers. Catchers were most frequently injured by the pitched ball as opposed to the batted ball.(Table 1) This would seem logical since the catcher is involved with every ball that the pitcher throws.

The body part most injured for pitchers was the face with 32.3% percent of the injuries, followed by the arm-wrist-elbow (13.4%), knee-ankle (10.1%), teeth (10.1), hand-fingers (9.7%), and head-neck (7.8%). Type injuries most associated with pitchers were contusions (36.5%), fractures (25.4%), sprains (11.2%), dental (10.1%), lacerations (6.9%), and concussions (2.0%). Pitchers were injured approximately one-half of the time by the batted ball, with the thrown ball being the second leading cause of injuries. (Table 1)

TYPE OF INJURY

A majority of the knee and ankle injuries were sprains (44.8%). If contusions were combined with sprains, they would account for 65.7% of the total knee and ankle injuries. Fractures accounted for 20.2% of the injuries. The single greatest cause of knee and ankle injuries is sliding. (Table 2)

The two major types of facial injuries to Little League Baseball players were dental injuries and fractures. These two injury types accounted for 63.8% of the facial injuries to

the 5-12 age group. Contusions and lacerations ranked third and fourth. The two leading types of facial injuries, dental and fractures, are serious injuries and the facemask has been recommended as a preventive measure. It is a popular belief that a majority of the facial injuries in youth baseball are caused by the pitched ball, but in fact the thrown ball accounts for one-third of the facial injuries and the batted ball accounts for another one-third. The pitched ball was associated with only 11% of the facial injuries. (Table2)

Contusions, lacerations, and hemorrhages accounted for a majority of the injuries to the eye (83.5%). As was true for facial injuries the leading causes of eye injuries were the batted and thrown ball.

The four major injuries to the head were contusions, concussions, lacerations, and fractures. Contusions accounted for 43.6%, concussions 21.5%, lacerations 19.8%, and fractures 2.8%. Concussions and fractures are serious injuries and the helmet should play a major role in preventing these injuries. The leading causes of head injuries were the batted ball, the thrown ball, being hit by a bat, and the pitched ball. (Table 2)

Chest injuries to youth baseball players receive a lot of attention as a cause of death. There were only 343 chest injuries out of a total 29,038 injuries. Approximately 75% of the chest injuries occurred in games and contusions accounted for a majority of the injuries (85.7%). There were no fatalities. One-third of the chest injuries are caused by the pitched ball, followed by the batted ball, colliding, the thrown ball, and being hit by a bat. Table 2)

COMMENT

The data in this paper presents a descriptive analysis of the injuries in the nation's largest organized youth baseball league. The ten years of injury data from Little League Baseball, Inc. is the only national injury information available, and epidemiological analysis of this data is critical to future research in youth baseball safety.

The Consumer Product Safety Commission stated in 1996 that the National Electronic Injury Surveillance System estimated 168,000 emergency room visits annually due to baseball/softball/t-ball injuries among 5 to 14 year olds. The Commission concluded that about one third of these injuries could be prevented or reduced in severity if reduced impact balls, safety bases, and face guards were universally worn.[2] The CPSC data made headlines in many national newspapers and caused concern among baseball parents and administrators.

We agree that prevention efforts are important to the sport, and support any intervention that has proven its effectiveness. It is also important to frame each intervention within the overall spectrum of injury in this sport. Looking at the context of the data presented in this paper, the potential benefits of safety bases and reduced impact balls are large. However, two other controversial areas, chest protectors and face protectors, appear to be of lesser importance.

Sliding was associated with almost two-thirds of the injuries to runners, and if collisions were included the percentage would increase to 71%. Sliding has always been associated with a large percentage of youth baseball injuries and will remain at the top of the list until proper sliding techniques are taught by coaches and until the debate over the use of safety bases is settled.[3]

Modified balls, designed to generate lower impact forces, also hold considerable promise in this game where over one-half of all injuries relate to contact with the ball. Although the impact dynamics of modified balls clearly differs from the traditional hard ball, there is still a need for a large scale epidemiologic study examining their effectiveness in the field.

There are a number of people who feel that all batters should be made to wear a protective vest.[4,5] A major problem is the lack of evidence that a vest will protect the batter and, as shown in this research, the very small number of chest injuries. In view of this, it is currently difficult to argue for use of protective vests.

It has been suggested that the facemask be required for all helmets in order to prevent facial injuries to the batter, and very good shatterproof eye protection is now available.[6,7] Our data, however, show that a majority of the facial injuries are received while playing defense. Data that is needed is whether facial injuries to the batter being hit by a pitched ball have a higher percentage of serious injuries, and if the facemask is in fact preventing facial injuries. Additional data is needed concerning the use of the facemask while running the bases.

The injury rate observed in this study is consistent with that found by Pasternak, et.al. in a survey of Little League affiliates in Rochester, NY.[8] The risk of injury – 1 in 500 players per season – is low, considering the risks associated with full body contact sports such as football.

Based on these data it appears that youth baseball is essentially a very safe activity. In addition, team sports can be used to promote physical activity, leadership, and teamwork. Given the declining levels of physical activity in the general population, and

the ever increasing proportion of sedentary adolescents, we would do well to continue to promote baseball as America's national pastime.

References

1. Baseball and Softball Council: Baseball: A report on participation in America's national pastime. Sporting Goods Manufacturers Association 1996:1-11.

2. Kyle SB: Consumer Product Safety Commission youth baseball protective equipment project final report. Consumer Product Safety Commission 1996.

3. Janda DH, Maguire R, Mackesy D, Hawkins RJ, Fowler P, Boyd J: Sliding injuries in college and professional baseball - a prospective study comparing standard and break-away bases. Clinical journal of Sports Medicine 1993; 3:78-81.

4. Janda DH, Viano DC, Andrzeak DV, HensingerRN: An analysis of preventive methods for baseball-induced chest impact injuries. Clinical Journal of Sports Medicine 1992; 2(3): 172-179.

5. Crisco JJ, Shonn PH, Greenwald RM: The influence of baseball modulus and mass on head and chest impacts: a theoretical study. Medicine and Science in Sports and Exercise 1997; 29(1):26-36.

6. Caveness LS: Ocular and facial injuries in baseball. International Ophthalmology Clinics 1988; 28(3):238-241

7. Vinger PF, Parver L, Alfaro VD, Woods T, Abrams BS: Shatter resistance of spectacle lenses. Journal of the American Medical Association 1997; 277(2):142-144.

8. Pasternack JS, Veenema KR, Callahan CM: Baseball injuries: a little league survey. Pediatrics, 1996; 98(3):445-448.

9. Committee on Sports Medicine and Fitness: Risk of injury from baseball and softball in children 5-14 years of age. Pediatrics 1994; 93:690-691.

Tab

Little League Baseball, Inc. (ages 5-12)
Injury Contact by Position
1987 - 1996

INJURY CONTACT	BASE RUNNER	INFIELDER	BATTER	OUTFIELDER	PITCHER	CATCHER	TOTAL
Sliding	3,703 (60.3%)	-	-	-	-	-	3,703 (13.4%)
Colliding	662 (10.8%)	1,025 (17.0%)	-	489 (11.9%)	274 (13.2%)	730 (20.0%)	3,180 (11.5%)
Falling	643 (10.5%)	311 (5.2%)	-	435 (10.6%)	68 (3.3%)	-	1,457 (5.3%)
Thrown Ball	467 (7.6%)	1,856 (30.9%)	-	631 (15.3%)	341 (16.4%)	480 (13.2%)	3,775 (13.7%)
Running	418 (6.8%)	-	-	-	-	-	418 (1.5%)
Batted Ball	35 (0.6%)	2,135 (35.5%)	235 (4.2%)	2,142 (52.0%)	1,022 (49.1%)	313 (8.6%)	5,882 (21.3%)
Tagging	-	179 (3.0%)	-	-	39 (1.9%)	-	218 (0.8%)
Pitched Ball	-	-	4,757 (85.4%)	-	-	852 (23.3%)	5,609 (20.4%)
Hit by Bat	-	-	-	-	-	565 (15.5%)	565 (2.1%)
Other	209 (3.4%)	406 (6.7%)	557 (10.1%)	363 (8.8%)	307 (14.7%)	669 (18.3%)	2,511 (9.1%)
Unknown		100 (1.7%)	18 (0.3%)	59 (1.4%)	29 (1.4%)	40 (1.1%)	246 (0.9%)
TOTAL	6,137 (100.0%)	6,012 (100.0%)	5,567 (100.0%)	4,119 (100.0%)	2,080 (100.0%)	3,649 (100.0%)	27,564 (100.0%)

Tal.

Little League Baseball, Inc. (ages 5-12)
Injury Contact by Body Part Injured
1987 - 1996

INJURY CONTACT	KNEE & ANKLE	FACE	HEAD	CHEST	TOTAL
Sliding	1,761 (40.2%)	-	-	-	1,761 (10.3%)
Pitched Ball	318 (7.3%)	1,193 (11.5%)	235 (11.9%)	111 (32.4%)	1,857 (10.8%)
Batted Ball	275 (6.3%)	3,566 (34.2%)	440 (22.2%)	70 (20.4%)	4,351 (25.4%)
Thrown Ball	-	3,581 (34.4%)	437 (22.1%)	35 (10.2%)	4,053 (23.7%)
Hit by Ball	-	941 (9.0%)	-	-	941 (5.5%)
Hit by Bat	-	-	366 (18.5%)	23 (6.7%)	389 (2.3%)
Colliding	567 (12.9%)	417 (4.0%)	202 (10.2%)	53 (15.4%)	1,239 (7.2%)
Falling	467 (10.7%)	-	-	-	467 (2.7%)
Running	423 (9.7%)	-	-	-	423 (2.5%)
Other	522 (11.9%)	530 (5.1%)	278 (14.1%)	49 (14.3%)	1,379 (8.1%)
Unknown	45 (1.0%)	188 (1.8%)	20 (1.0%)	2 (0.6%)	255 (1.5%)
TOTAL	4,378 (100.0%)	10,416 (100.0%)	1,978 (100.0%)	343 (100.0%)	17,115 (100.0%)

Little League Baseball, Inc. (ages 5-12)
Injury Contact by Body Part Injured
1987 - 1996

INJURY CONTACT	KNEE & ANKLE	FACE	HEAD	CHEST	TOTAL
Sliding	1,761 (40.2%)	-	-	-	1,761 (10.3%)
Pitched Ball	318 (7.3%)	1,193 (11.5%)	235 (11.9%)	111 (32.4%)	1,857 (10.8%)
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Running	423 (9.7%)	-	-	-	423 (2.5%)
Other	522 (11.9%)	530 (5.1%)	278 (14.1%)	49 (14.3%)	1,379 (8.1%)
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TOTAL	4,378 (100.0%)	10,416 (100.0%)	1,978 (100.0%)	343 (100.0%)	17,115 (100.0%)

NATIONAL AMATEUR BASEBALL

CATASTROPHIC INJURY SURVEILLANCE PROGRAM

FINAL REPORT

1989 – 1999

USA BASEBALL

MEDICAL/SAFETY ADVISORY COMMITTEE

NATIONAL CENTER FOR CATASTROPHIC SPORTS INJURY RESEARCH

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

INTRODUCTION

USA Baseball had been concerned with safety issues for many years, and in 1989 formed a USA Baseball Medical/Safety Advisory Committee. The Committee initiated a National Amateur Baseball Catastrophic (Deaths and Permanent Disability) Surveillance Program, which has issued annual reports from 1989 through 1999.

The final report includes eleven years of data collection from 1989 through 1999. Participation numbers for that period of time included 49,221,122 amateur baseball players. Catastrophic injuries for that same period of time included 20 fatalities, 22 disability injuries, and 14 injuries with complete recovery. The catastrophic injury rate for the eleven years is 0.11 injuries per 100,000 participants. This figure is very low. The rates were changed from earlier reports due to the fact that all non-related baseball injuries (automobile accidents, drowning, etc.) were deleted from the report. The eleven year injury rate for fatalities was 0.04 per 100,00 participants, 0.05 for disability injuries, and 0.03 for serious or recovery injuries.

As one would expect, catastrophic injuries in baseball happen when players are hit with a pitched or thrown ball, players colliding when chasing a fly ball, and the head/finger first slide.

Any data collection system is only as good as the organizations collecting the data. At the present time a majority of the participating organizations are making a good effort in getting the required information. In most cases we know how the accidents happen, but in the future an in-depth investigation of each accident may be advisable.

Information was requested and received from the death certificate file of the Consumer Product Safety Commission covering the period from January 1988 to September 1993. Information was available on six baseball deaths during that period. Four of the deaths were to individuals over 30 years of age and did not fit into our data collection system. One death was to a Little League 10 year old who was struck in the chest by a pitched ball causing cardiac arrythmia. This case was in the USA Baseball files. The last case was a death to the 13 year old who was struck in the neck by a baseball causing brainstem infarction. His case was not in USA Baseball files. Information was not available on what type of league the victim was playing in or if the baseball was thrown or batted. These six deaths were in organized baseball. Additional information was requested from the Consumer Product Safety Commission death certificate file covering the period from 1994 through 1997. Information was received on 18 baseball deaths, of which I had information on four. I did not have information on three of the cases, and the remaining eleven involved accidents happening in the streets, backyards, and in other play that was not organized. The eleven cases also included accidents to three and four year olds. It is our feeling that we are getting the information from the organizations that are participating in the study. The Consumer Product Safety Commission was contacted in April 2000 for an update of their death certificate files.

AMERICAN AMATEUR BASEBALL CONGRESS

CATASTROPHIC INJURY SURVEILLANCE PROGRAM

PROGRAM

AMERICAN AMATEUR BASEBALL CONGRESS

CONTACT

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INSURANCE

K & K INSURANCE
1712 MAGNAVOX WAY
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FT. WAYNE, IN 46801
TELEPHONE: (219) 459-1836
FAX: (219) 459-6911

PARTICIPANT INFORMATION

8 and under
10 and under
12 and under
14 and under
16 and under
18 and under
unlimited

LEAGUE INFORMATION

SINCE 1935
40 STATES
AGE 8 THROUGH ADULT
SEVEN DIVISIONS

CATASTROPHIC INJURIES
1989-1999

YEAR	FATALITIES	DISABILITY	RECOVER	PARTICIPATION	INJ RATE
1989	0	0	0	177,000	0.00
1990	0	0	0	177,000	0.00
1991	1	0	0	236,000	0.42
1992	0	0	0	236,000	0.00
1993	0	0	0	239,500	0.00
1994	0	0	0	245,924	0.00
1995	0	0	0	259,000	0.00
1996	0	0	0	275,520	0.00
1997	0	0	0	282,320	0.00
1998	0	0	0	280,000	0.00
1999	0	0	0	280,380	0.00
TOTAL	1	0	0	2,688,644	0.04

* PARTICIPATION NUMBERS ARE APPROXIMATIONS
* INJ RATES = NUMBER OF INJURIES PER 100,000 PARTICIPANTS

PROGRAM

AMERICAN LEGION BASEBALL

CONTACT

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INDIANAPOLIS, IN 46204
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INSURANCE

Maggie VanDyke or
Pat Maloney
P. O. Box 4806
Oak Brook, IL 60522-4806
Telephone: 1 (800) 323-7326

PARTICIPANT INFORMATION

17- 18 YEAR OLDS
99.9 % MALE

CATASTROPHIC INJURIES
1989-1999

YEAR	FATALITIES	DISABILITY	RECOVER	PARTICIPATION	INJ RATE
1989	UNK.				
1990	UNK.				
1991	UNK.				
1992	0	0	0	86,000	0.00
1993	0	0	0	88,000	0.00
1994	0	0	1	90,440	1.11
1995	1	0	0	93,000	1.07
1996	0	0	0	95,000	0.00
1997	1	0	1	99,420	2.01
1998	0	0	0	95,000	0.00
1999	0	0	0	93,500	0.00
TOTAL	2	0	2	740,360	0.54

* PARTICIPATION NUMBERS ARE APPROXIMATIONS
* INJ RATES = NUMBER OF INJURIES PER 100,000 PARTICIPANTS

CASE REPORT

Injured player in Junior American Legion game hit in the head by an errant throw. Critical condition, two surgical procedures and recovered. No other details available.

A 15 year old died after scoring a run in a game. Cause of death was not known, but was not related to the skills associated with baseball.

A 17 year old pitching bating practice from behind a protective screen. Batted ball hit concrete curb around cage and hit pitcher in temple. Player was not wearing a helmet. Player died.

A 17 year old was hit by a pitch in a game, taken to the hospital and released, but two days later had problems with slurred speech and fever. He had a brain hemorrhage and swelling. Recovered, but could not participate in sports for a month.

PROGRAM

BABE RUTH BASEBALL (PARTICIPATION STARTED IN 1999)

CONTACT

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ROSEMARY SCHOELLKOPF

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FT. WAYNE, IN 46801
TELEPHONE: (219) 455-5806
FAX: (219) 455-5624

PARTICIPANT INFORMATION

6,960 LEAGUES
44,026 TEAMS

CATASTROPHIC INJURIES
1999

YEAR	FATALITIES	DISABILITY	RECOVER	PARTICIPATION	INJ RATE
1999	0	0	0	866,200	0.00

*PARTICIPATION NUMBERS ARE APPROXIMATIONS
* INJ RATES = NUMBER OF INJURIES PER 100,000 PARTICIPANTS

PROGRAM

LITTLE LEAGUE BASEBALL

CONTACT

STEVE KEENER
P. O. BOX 3485
WILLIAMSPORT, PA 17701
TELEPHONE: (717) 326-1921

INSURANCE

DAN KIRBY
SAME ADDRESS

PARTICIPANT INFORMATION

12 and under
13 – 15
16 – 18
Challenger – physically and mentally handicapped 16 – 18
BASEBALL AND SOFTBALL LEAGUES – NOT ALL INSURED

CATASTROPHIC INJURIES
1989-1999

YEAR	FATALITIES	DISABILITY	RECOVER	PARTICIPATION	INJ RATE
1989	0	1	0	1,825,460	0.05
1990	1	1	0	1,978,058	0.10
1991	0	1	0	2,432,850	0.04
1992	0	1	0	2,584,995	0.04
1993	2	1	0	2,700,000	0.11
1994	2	0	1	2,729,985	0.11
1995	0	1	1	2,759,346	0.07
1996	0	0	0	2,779,770	0.00
1997	0	0	0	2,740,634	0.00
1998	0	0	0	2,331,459	0.00
1999	0	0	0	2,514,345	0.00
TOTAL	5	6	2	27,376,902	0.05

CATASTROPHIC INJURIES BY YEAR
1989-1999

YEAR	FREQUENCY	PERCENT
1989	1	7.7
1990	2	15.4
1991	1	7.7
1992	1	7.7
1993	3	23.1
1994	3	23.1
1995	2	15.4
1996	0	0.0
1997	0	0.0
1998	0	0.0
1999	0	0.0
TOTAL	13	100.0

CATASTROPHIC INJURIES BY AGE
1989-1999

AGE	FREQUENCY	PERCENT
6-7	0	0.0
8-10	9	69.2
11-13	4	30.8
14-16	0	0.0
17	0	0.0
TOTAL	13	100.0

CATASTROPHIC INJURIES BY BODY PART
1989-1999

BODY PART	FREQUENCY	PERCENT
CHEST/HEART	4	30.8
EYE	3	23.1
HEAD	6	46.1
TOTAL	13	100.0

CATASTROPHIC INJURIES BY GENDER
1989-1999

YEAR	FREQUENCY	PERCENT
MALE	13	100.0
FEMALE	0	0.0
TOTAL	13	100.0

CATASTROPHIC INJURIES BY ACIDENT
1989-1999

ACIDENT	FREQUENCY	PERCENT
BATTED BASEBALL	1	7.7
PITCHED BASEBALL	3	23.1
THROWN BASEBALL	6	46.1
BASE RUNNING	1	7.7
PITCHING MACHINE	1	7.7
COLLISION-HEAD TO GROUND	1	7.7
TOTAL	13	100.0

CATASTROPHIC INJURIES BY EVENT
1989-1999

EVENT	FREQUENCY	PERCENT
HIT BY PITCH (PRACTICE NO HELMET)	1	7.7
HIT BY PITCH (GAME)	2	15.4
HIT BY BATTED BALL	1	7.7
HIT BY THROWN BALL	6	46.1
PITCHING MACHINE PITCH	1	7.7
RUNNING BASES	1	7.7
PLAYING 2ND – COLLISION	1	7.7
TOTAL	13	100.0

CATASTROPHIC INJURIES BY ACTIVITY
1989-1999

ACTIVITY	FREQUENCY	PERCENT
GAME	5	38.5
PRACTICE	5	38.5
Pre-Game Warm-up	2	15.4
TRYOUTS	1	7.6
TOTAL	13	100.0

CATASTROPHIC INJURIES BY INJURY OUTCOME
1989-1999

OUTCOME	FREQUENCY	PERCENT
DEATH	5	38.4
BLINDNESS (ONE EYE)	2	15.4
VISION PROBLEM	1	7.7
SKULL FRACTURE	1	7.7
SUBDURAL HEMATOMA	2	15.4
EPIDURAL HEMATOMA	1	7.7
COMA	1	7.7
TOTAL	13	100.0

CATASTROPHIC INJURIES ACTIVITY BY OUTCOME
1989-1999

ACTIVITY	DEATH	BLIND IN ONE EYE	VISION PROBLEM	SUBDURAL HEMATOMA	SKULL FX	COMA
PITCHED BALL	2	0	1	0	0	0
THROWN BALL	1	1	0	3	1	0
BATTED BALL	0	1	0	0	0	0
PITCH. MACHINE	1	0	0	0	0	0
RUNNING BASES	1	0	0	0	0	0
COLLISION	0	0	0	0	0	1
TOTAL	5	2	1	3	1	1

PROGRAM

NATIONAL AMATEUR BASEBALL FEDERATION

CONTACT

CHARLES BLACKBURN
12406 KEYNOTE LANE
BOWIE, MD 20718-0705
TELEPHONE: (301) 262-5005

INSURANCE

FRAZIER INSURANCE

PARTICIPANT INFORMATION

12 AND UNDER FRESHMAN
14 AND UNDER SOPHOMORE
16 AND UNDER JUNIOR
18 AND UNDER SENIOR HIGH SCHOOL ELIGIBLE
20 AND UNDER COLLEGE
UNLIMITED MAJOR

CATASTROPHIC INJURIES
1989-1999

YEAR	FATALITIES	DISABILITY	RECOVER	PARTICIPATION	INJ RATE
1989	0	0	0	110,000	0.00
1990	0	0	0	110,000	0.00
1991	0	0	0	110,000	0.00
1992	0	0	0	110,000	0.00
1993	0	0	0	112,000	0.00
1994	0	0	0	112,000	0.00
1995	0	0	0	120,400	0.00
1996	0	0	0	129,430	0.00
1997	0	0	0	139,137	0.00
1998	0	0	0	200,000	0.00
1999	0	0	0	200,000	0.00
TOTAL	0	0	0	1,452,967	0.00

* PARTICIPATION NUMBERS ARE APPROXIMATIONS
* INJ RATES = NUMBER OF INJURIES PER 100,000 PARTICIPANTS

PROGRAM

NATIONAL ASSOCIATION OF INTERCOLLEGIATE ATHLETICS

CONTACT

NATIONAL ASSOCIATION OF INTERCOLLEGIATE ATHLETICS
6120 S. Yale Avenue, Suite 1450
Tulsa, OK 74136
TELEPHONE: (918) 494-8828
FAX: (918) 494-8841

INSURANCE CONTACT

DOUG SLIFKA
ABOVE ADDRESS

PARTICIPANT INFORMATION

293 SCHOOLS
APPROXIMATE 6,000 PARTICIPANTS

CATASTROPHIC INJURIES
1989-1999

ONLY COLLECTS INJURY INFORAMTION AT NATIONAL CHAMPIONSHIPS. INSURANCE NOT PROVIDED FOR MEMBERSHIP. DID HAVE A HEART RELATED DEATH IN 1986.

PROGRAM

NATIONAL BASEBALL CONGRESS

CONTACT

STEVE SHAAD
P. O. BOX 1420
WICHITA, KS 67201
TELEPHONE: (316) 267-3372

DIAN OVERAKER
DIRECTOR OF ADMINISTRATION

INSURANCE CONTACT

Jill Jenkins
Francis L. Dean Associates
Ft. Worth, TX
(800) 375-0552

PARTICIPANT INFORMATION

NATIONAL BASEBALL CONGRESS	AGES 18 – 40
HAP DUMONT YOUTH BASEBALL	YOUTH

CATASTROPHIC INJURIES
1989-1999

YEAR	FATALITIES	DISABILITY	RECOVER	PARTICIPATION	INJ RATE
1989	0	0	0	19,000	0.00
1990	0	0	0	19,000	0.00
1991	0	0	0	19,000	0.00
1992	0	0	0	19,000	0.00
1993	0	0	0	19,000	0.00
1994	0	0	0	19,000	0.00
1995	0	0	0	33,000	0.00
1996	0	0	0	33,000	0.00
1997	0	0	0	35,000	0.00
1998	0	0	0	30,000	0.00
1999	0	0	0	32,000	0.00
TOTAL	0	0	0	277,000	0.00

* PARTICIPATION NUMBERS ARE APPROXIMATIONS
* INJ RATES = NUMBER OF INJURIES PER 100,000 PARTICIPANTS

PROGRAM

NATIONAL COLLEGIATE ATHLETIC ASSOCIATION

CONTACT

RANDY DICK
6201 COLLEGE BLVD.
OVERLAND PARK, KS 66211-2422
TELEPHONE: (913) 339-1906

INSURANCE CONTACT

RANDY DICK

PARTICIPANT INFORMATION

INCLUDES MALES IN BASEBALL
FEMALES IN SOFTBALL

CATASTROPHIC INJURIES
1989-1999

YEAR	FATALITIES	DISABILITY	RECOVER	PARTICIPATION	INJ RATE
1989	0	0	0	29,058	0.00
1990	0	0	1	28,875	3.46
1991	1	0	0	28,878	3.46
1992	1	0	0	31,321	3.19
1993	0	0	0	32,000	0.00
1994	0	0	0	33,529	0.00
1995	0	0	0	35,000	0.00
1996	0	0	0	36,000	0.00
1997	0	1	0	38,050	2.62
1998	0	0	0	39,000	0.00
1999	0	1	0	39,000	2.56
TOTAL	2	2	1	370,711	1.35

* PARTICIPATION NUMBERS ARE APPROXIMATIONS
* INJ RATES = NUMBER OF INJURIES PER 100,000 PARTICIPANTS

CASE REPORTS

1990 – FRACTURED SKULL HIT BY BATTED BALL WHILE STANDING BEHIND BATTING CAGE. BALL HIT EXPOSED AREA OF HEAD
1991 – HEART RELATED DEATH
1992 – TWO PLAYER COLLISION IN OUTFIELD – HEAD INJURY DEATH
1997 – HEAD FIRST SLIDE INTO HOME PLATE, TOP OF HEAD HIT SHIN GUARD OF CATCHER. FRACTURED CERVICAL VERTEBRA AND PARALYSIS.

1999 – ATHLETE HIT IN FACE WITH A 92 MPH FASTBALL. PERMANENT EYE DAMAGE. WAS WARMING-UP OUTSIDE OF BATTER'S BOX. MAY BE LITIGATION.

PROGRAM

NATIONAL FEDERATION OF STATE HIGH SCHOOL ASSOCIATIONS

CONTACT

DON SPARKS
P. O. BOX 690
INDIANAPOLIS, IN 46206
TELEPHONE: (317) 972-6900
FAX: (317) 822-5700

INSURANCE CONTACT

SANDY FIELD
NATIONAL SPORTS UNDERWRITER
OVERLAND PARK, KS 66212
TELEPHONE: (800) 621-2116

PARTICIPANT INFORMATION

MALE - BASEBALL
FEMALE - SOFTBALL
PARTICIPATION NUMBERS COMBINE SOFTBALL AND BASEBALL IN THE 1994, 1995, 1996, 1997, 1998, 1999 SEASONS.

CATASTROPHIC INJURIES
1989-1999

YEAR	FATALITIES	DISABILITY	RECOVER	PARTICIPATION	INJ RATE
1989	1	2	1	413,836	0.97
1990	1	2	0	413,581	0.72
1991	2	0	0	419,670	0.48
1992	0	0	0	423,286	0.00
1993	0	1	1	430,401	0.46
1994	0	1	1	732,000	0.27
1995	2	3	0	759,421	0.66
1996	0	1	0	783,693	0.13
1997	2	1	1	797,446	0.50
1998	0	1	2	816,643	0.37
1999	0	1	2	823,139	0.36
TOTAL	8	13	8	6,813,116	0.43

* PARTICIPATION NUMBERS ARE APPROXIMATIONS
* INJ RATES = NUMBER OF INJURIES PER 100,000 PARTICIPANTS
* FIRST FEMAIL SOFTBALL INJURY IN 1994

CASE STUDIES (1995-1999)

A 13 year old was struck by a line drive during warm-ups in practice. He was in left field at the time. He received an orbital fracture with possible loss of vision in one eye.

A 15 year old was running laps, collapsed and died. Death was heart related.

A 15 year old collided with a teammate during practice while chasing a fly ball. He ruptured an artery in the brain and was in a coma. Extent of disability is unknown.

A 16 year old was struck by lightning during a game. He died in the hospital later that day.

A 17 year old female softball player was playing second base during batting practice an was struck in the eye by a batted ball. She lost her left eye.

A 17 year old sliding head first into home plate hit head on the catcher's shin guard. Quadriplegia.

First baseman catching a pop fly between home and first base. Runner ran into him and the bill of the batter helmet hit the first baseman in the throat. Cardiac arrest and death.

Pitcher hit in the throat by line drive during a game. Had a tracheotomy to assist breathing and should recover.

Base runner going back to third base when struck in chest by thrown ball. Cardiac arrest and death.

Player sliding into home plate head first, hit head into chest of catcher, fracture cervical vertebra, surgery.

Pitcher struck in head by line drive during intersquad game, in a coma for day and one half, recovered.

Base runner hit in neck with thrown ball during practice, traumatic aneurysms, three surgeries due to bleeding in skull cavity, recovered.

Coach hit in head by line drive which caused death.

Pitcher was hit by a line drive during a game. Ball struck him in the head. He was taken to the hospital and recovered with no permanent injury.

Athlete pitching batting practice was struck in the head by a batted ball. He recovered with no injuries, but had to stay in the hospital for a few days.

The athlete was hit by a batted ball in the batting cage. He was only 25 feet from the batter. He fractured his nose and cheekbone. He also had two surgeries and will no longer play baseball.

PROGRAM

NATIONAL POLICE ATHLETIC LEAGUE

CONTACT

JERRY BABCOCK
618 US Highway One, Suite 201
N. PALM BEACH, FL 33408
TELEPHONE: (407) 844-1823
FAX: (407) 863-6120

SALLY S. CUNNINGHAM
DIRECTOR OF MARKETING AND MEMBER SERVICES

INSURANCE CONTACT

VONDA BARBOUR
Student Insurance Division
300 1st AVENUE SOUTH
SUITE 400
ST. PETERSBURG, FL 33701
TELEPHONE: (800) 282-5635
FAX: (813) 823-3680

PARTICIPANT INFORMATION

10 AND UNDER	- BOYS 29%	GIRLS 29%
11-12	- BOYS 25%	GIRLS 24%
13-15	- BOYS 25%	GIRLS 26%
16-18	- BOYS 21%	GIRLS 20%

CATASTROPHIC INJURIES
1997-1999

YEAR	FATALITIES	DISABILITY	RECOVER	PARTICIPATION	INJ RATE
1997	0	0	0	25,000	0.00
1998	0	0	0	25,000	0.00
1999	0	0	0	25,000	0.00
TOTAL	0	0	0	75,000	0.00

PROGRAM

NATIONAL JUNIOR COLLEGE ATHLETIC ASSOC.

CONTACT

EDWARD HARDEMAN
NJCAA
P.O. BOX 7305
COLORADO SPRINGS, CO 80933-7305
TELEPHONE: (719) 590-9778

INSURANCE CONTACT

SANDY FIELD
NAT'L SPORTS UNDERWRITER
9300 METCALF
OVERLAND PARK, KS 66212
TELEPHONE: (800) 621-2116

PARTICIPANT INFORMATION

CATASTROPHIC INJURIES
1989-1999

YEAR	FATALITIES	DISABILITY	RECOVER	PARTICIPATION	INJ RATE
1989	0	0	0	8,000	0.00
1990	0	0	0	8,000	0.00
1991	0	0	0	8,000	0.00
1992	0	0	0	8,100	0.00
1993	0	0	0	8,427	0.00
1994	0	0	0	8,372	0.00
1995	0	0	0	8,350	0.00
1996	0	0	0	8,375	0.00
1997	0	0	0	8,450	0.00
1998	0	0	0	13,387	0.00
1999	0	0	0	8,906	0.00
TOTAL	0	0	0	87,947	0.00

* PARTICIPATION NUMBERS ARE APPROXIMATIONS
* INJ RATES = NUMBER OF INJURIES PER 100,000 PARTICIPANTS
* BASEBALL-SOFTBALL PARTICIPATION COMBINED STARTING IN 1998

PROGRAM

PONY BASEBALL AND SOFTBALL

CONTACT

ABRAHAM L. KEY III
PONY BASEBALL
P.O. BOX 225
WASHINGTON, PA 15301
TELEPHONE: (412) 225-1060

INSURANCE CONTACT

DOMINIC GAGLIARDI
GAGLIARDI INSURANCE SERVICES
2380 S. BASCOM AVENUE
SUITE 100
CAMPBELL, CA 95008
TELEPHONE: (408) 377-7781
FAX: (408) 377-0655

CATASTROPHIC INJURIES
1989-1999

YEAR	FATALITIES	DISABILITY	RECOVER	PARTICIPATION	INJ RATE
1989	0	0	0	293,040	0.00
1990	0	0	0	335,010	0.00
1991	0	0	0	357,360	0.00
1992	0	0	0	379,560	0.00
1993	0	0	0	397,575	0.00
1994	0	0	0	424,815	0.00
1995	0	0	0	450,000	0.00
1996	0	0	0	450,000	0.00
1997	0	0	0	500,000	0.00
1998	0	0	0	420,000	0.00
1999	1	0	0	450,000	0.22
TOTAL	1	0	0	4,457,360	0.02

* PARTICIPATION NUMBERS ARE APPROXIMATIONS
* INJ RATES = NUMBER OF INJURIES PER 100,000 PARTICIPANTS

Pony baseball did have a nine year old participant die after being struck in the helmet from a pitch in a game. Autopsy reports indicated cause of death being heart related and not due to being struck by the ball. (1996)

Six year old player died during coach pitch. No other information available.

PROGRAM

CAPE COD BASEBALL

CONTACT

JUDY WALDER SCARAFILE
449 BRAGGS LANE
BARNSTABLE, MA 02630
TELEPHONE: (508) 362-3036

PARTICIPANT INFORMATION

COLLEGE PLAYERS SUMMER LEAGUE

CATASTROPHIC INJURIES
1993-1999

YEAR	FATALITIES	DISABILITY	RECOVER	PARTICIPATION	INJ RATE
1993	0	0	0	250	0.00
1994	0	0	0	267	0.00
1995	0	0	0	240	0.00
1996	0	0	0	250	0.00
1997	0	0	0	250	0.00
1998	0	0	0	250	0.00
1999	0	0	0	250	0.00
TOTAL	0	0	0	1,757	0.00

* PARTICIPATION NUMBERS ARE APPROXIMATIONS
* INJ RATES = NUMBER OF INJURIES PER 100,000 PARTICIPANTS

PROGRAM

DIXIE BASEBALL

CONTACT

JOHN SADLER, JR.
SADLER & CO.
P.O. DRAWER 5866
COLUMBIA, SC 29250-5866
TELEPHONE: (800) 622-7370
FAX: (803) 256-4017

Jimmy Brown
EXEC. DIRECTOR
DIXIE BASEBALL, INC.
P.O. BOX 193
Montgomery, AL 36101
TELEPHONE: (334) 263-7529
FAX: (334) 241-2301

INSURANCE CONTACT

K AND K INSURANCE
FT. WAYNE, IN

PARTICIPANT INFORMATION

DIXIE YOUTH TEE BALL (8 AND UNDER)
DIXIE YOUTH MINORS (10 AND UNDER)
DIXIE YOUTH MAJORS (12 AND UNDER)
DIXIE BOYS BASEBALL (13 AND 14)
DIXIE MAJORS BASEBALL (15-18)
DIXIE SWEETEES (FEMALE) (7 AND UNDER)
DIXIE ANGELS (FEMALE) (9 AND UNDER)
DIXIE PONYTAILS (FEMALE) (12 AND UNDER)
DIXIE BELLES (FEMALE) (15 AND UNDER)
DIXIE DEBS (FEMALE) (19 AND UNDER)

CATASTROPHIC INJURIES
1989-1999

YEAR	FATALITIES	DISABILITY	RECOVER	PARTICIPATION	INJ RATE
1989	0	0	0	343,260	0.00
1990	0	0	0	343,260	0.00
1991	0	0	0	343,260	0.00
1992	0	0	0	343,260	0.00
1993	0	0	0	350,000	0.00
1994	0	0	0	396,979	0.00
1995	0	0	0	429,165	0.00
1996	1	0	0	436,800	0.23
1997	0	1	0	435,705	0.23
1998	0	0	1	421,275	0.24
1999	0	0	0	417,571	0.00
TOTAL	1	1	1	4,260,535	0.07

CASE REPORT –

Two outfielders going after a fly ball; injured player dove for the ball and fractured cervical spine in collision with other player. Player died.

A 14 year old playing third base was struck in the eye by a line drive. Eye was removed.

A 13 year old pitching in a game was hit in the head by a line drive during the fourth inning. He was diagnosed with a fractured skull and a brain hematoma. The latest word was that the player was in good condition at the hospital.

FINAL REPORT

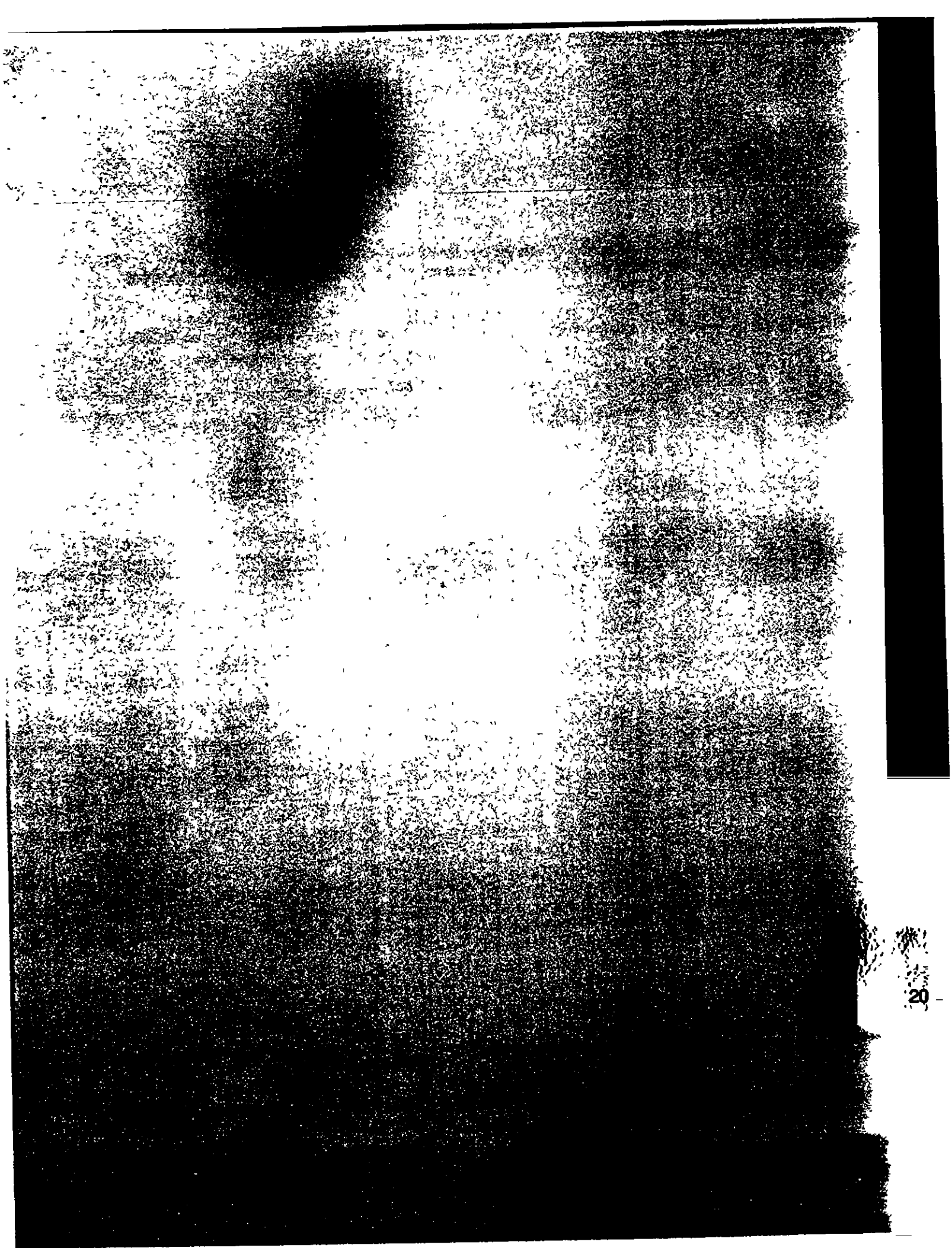
ALL TEAMS COMBINED

CATASTROPHIC INJURIES
1989-1999*

YEAR	FATALITIES	DISABILITY	RECOVER	PARTICIPATION	INJ RATE
1989	1	3	1	3,245,875	0.15
1990	2	3	1	3,412,784	0.18
1991	4	1	0	3,955,018	0.13
1992	1	1	0	4,221,522	0.05
1993	2	2	1	4,404,339	0.11
1994	2	1	3	4,533,157	0.13
1995	3	4	1	4,946,922	0.16
1996	1	1	0	5,027,838	0.04
1997	3	3	2	5,076,362	0.16
1998	0	1	3	4,647,014	0.09
1999	1	2	2	5,750,291	0.09
TOTAL	20	22	14	49,221,122	0.11

* PARTICIPATION NUMBERS ARE APPROXIMATIONS
* INJ RATES = NUMBER OF INJURIES PER 100,000 PARTICIPANTS
* INJURY RATES CHANGED FROM 1993 REPORT DUE TO THE FACT THAT NON-BASEBALL INJURIES (AUTOMOBILE ACCIDENTS) WERE DELETED FROM THE DATA. THE 1999 FINAL REPORT INCLUDES ONLY BASEBALL AND SOFTBALL INJURIES.

INDEX OF BASEBALL PROGRAMS



Division I Baseball Statistical Trends (1970-1998)

(all are per game for each team)

Year	Teams†	Avg. Games Per Team	Batting Average	Scoring	Home Runs Per Game	Stolen Bases Per Game	Earned-Run Average	Strikeouts Per 9 Innings	Fielding Percentage
1970	181	#32.8	#.262	#4.96	#0.40	1.15	#3.54	6.77	.948
1971	192	34.4	.267	5.28	0.46	1.16	3.67	6.92	.948
1972	202	34.1	.266	5.01	0.44	#1.09	3.35	6.69	.949
1973	203	34.0	.266	5.07	0.42	1.13	3.46	6.60	.949
1974‡	187	38.4	.274	5.33	0.49	1.24	3.79	5.94	.949
1975	168	39.0	.273	5.38	0.50	1.30	3.76	6.13	.950
1976	194	41.9	.282	5.65	0.55	1.45	3.91	6.02	.950
1977	210	42.5	.286	5.83	0.62	1.34	4.22	6.11	.948
1978	213	42.9	.288	6.08	0.66	1.39	4.37	5.97	.947
1979	220	43.6	.289	6.09	0.62	1.49	4.42	5.72	.948
1980	211	44.6	.295	6.22	0.66	1.36	4.59	5.60	.948
1981	237	48.4	.300	6.52	0.74	1.49	5.05	#5.51	#.946
1982	222	46.8	.298	6.39	0.69	*1.52	4.95	5.56	.948
1983	225	44.8	.297	6.44	0.76	1.48	5.02	5.73	.948
1984	240	48.3	.295	6.41	0.78	1.42	5.06	5.94	.948
1985	250	51.9	*.306	6.94	0.92	1.47	5.51	5.96	.948
1986	254	50.0	.301	6.79	0.89	1.48	5.42	6.10	.947
1987	263	48.9	.299	6.72	0.89	1.45	5.38	6.19	.949
1988	266	51.2	.297	6.53	0.84	1.38	5.29	6.28	.950
1989	259	49.9	.289	6.15	0.67	1.40	4.94	6.22	.953
1990	256	52.0	.290	6.07	0.66	1.41	4.88	6.09	.952
1991	262	52.6	.294	6.30	0.73	1.36	5.11	6.21	.952
1992	268	50.8	.291	6.18	0.68	1.36	5.10	6.23	*.954
1993	271	50.1	.288	6.08	0.72	1.37	5.10	6.27	.953
1994	273	51.9	.290	6.24	0.69	1.36	5.16	6.36	.952
1995	271	53.1	.289	6.20	0.70	1.30	5.19	6.49	.953
1996	271	52.3	.294	6.48	0.77	1.30	5.47	6.66	.952
1997	273	*53.1	.304	7.00	0.96	1.26	5.93	6.94	.951
1998	273	52.4	*.306	*7.12	*1.06	1.29	*6.12	*7.07	.952

†Teams reporting statistics, not the total number of teams in the division; ‡First year of aluminum bat; *Record high; #Record low.

Exhibit 1.2

PITCHERS - UP THE MIDDLE SURVEY

Number hit *Head face*

MONTH	NUMBER HIT	HEAD/ FACE	TORSO	HAND/ ARM	FOOT/ LEG	EVAL ONLY	TAKEN OUT	MISSED NEXT	DL
APRIL	58	1	7	17	33	48	10	1	1
MAY	54	2	8	15	29	48	6	0	2
JUNE	61	1	9	18	33	56	5	1	1
JULY	53	3	6	14	30	49	4	2	2
AUGUST	47	0	6	12	29	42	5	1	0
SEPT	43	0	10	9	24	39	4	0	0
TOTALS	316	7	46	85	178	282	34	5	6

EAS13955

10-28

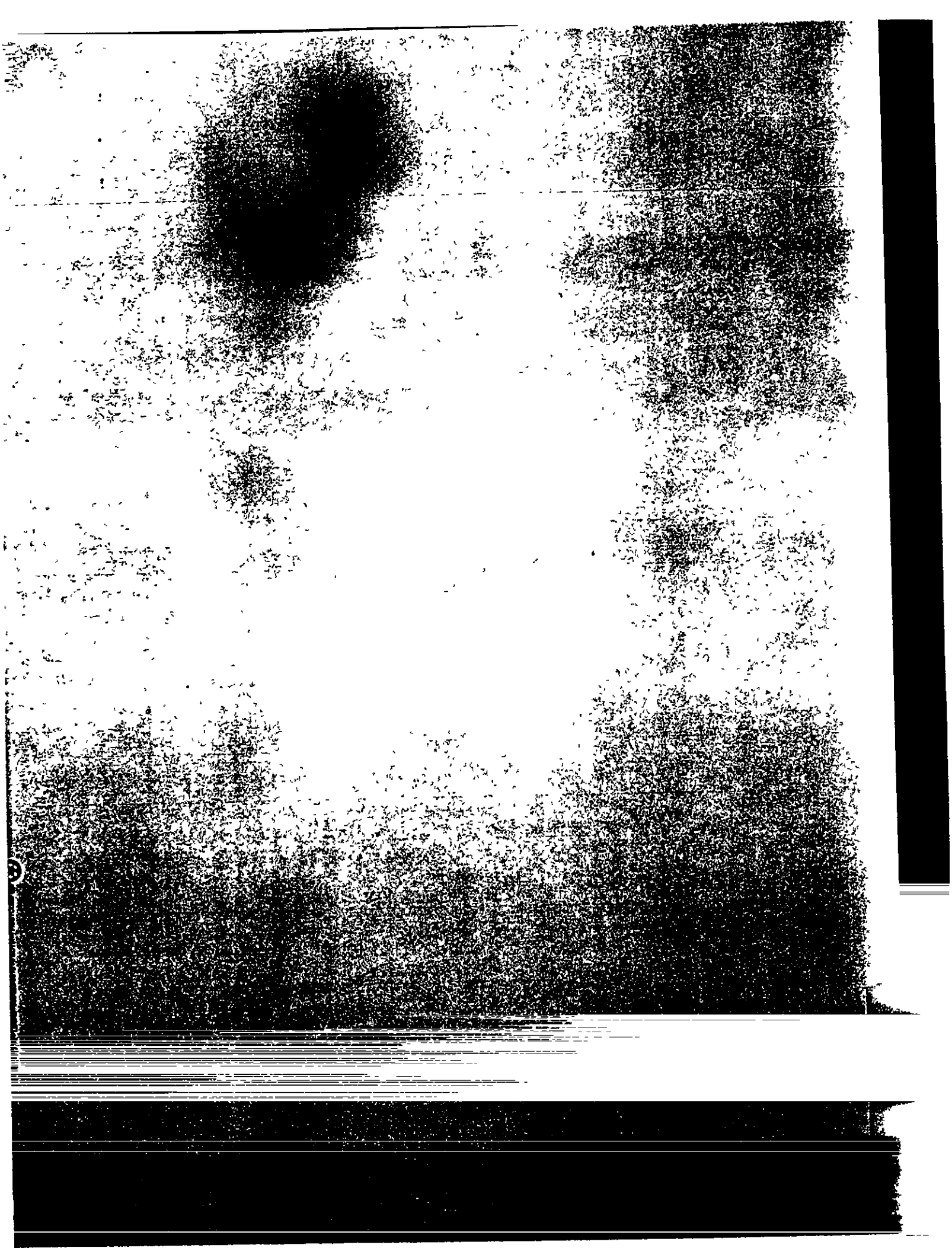


Exhibit 1.1

Jim

I wanted to send you the completed survey I took this summer with 100% compliance from all MLB athletic trainers. In comparing it to a memorandum from Cedric Dempsey of the NCAA the findings were interesting.

118 Division I schools reported 375 incidents of pitchers being hit by a batted ball. Of these, 11% need doctor's attention and 2% were considered serious.

In major league baseball with the 1998 season having been reported, there were 316 incidents of pitchers being hit by a batted ball. Of these, 11% were seen by a physician and 2%(the number of players being placed on the disabled list) were considered serious.

I am planning on completing my research from this project and am going to publish this hopefully this winter.

Kirk Baggstaff

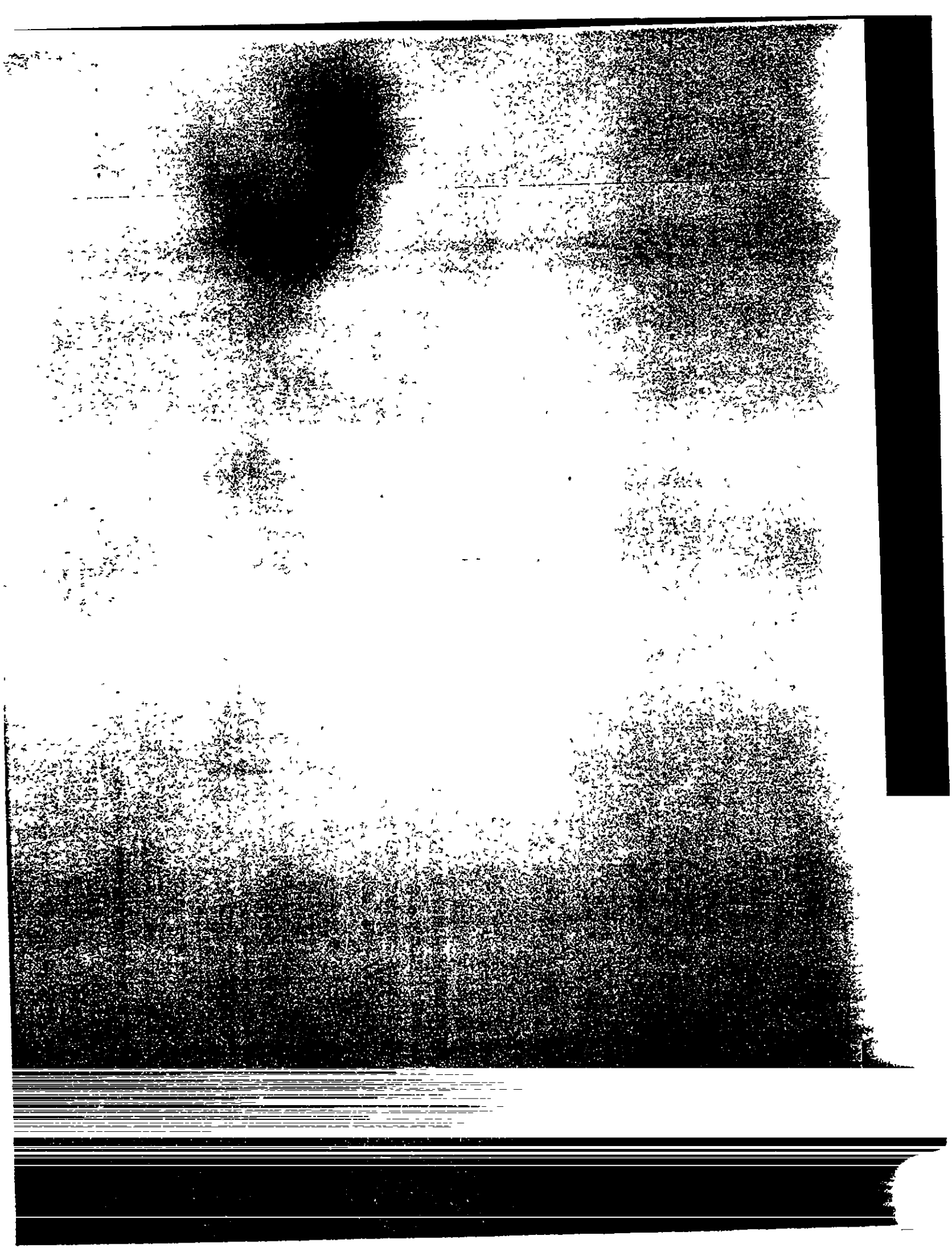


EXHIBIT V

Program to Develop Baseball Bat Performance Procedures Using a Dynamic Hitting Machine and Provide Verification with Laboratory Test Methods

FINAL REPORT

Prepared by

Lawrence P. Fallon, PE
Principal, Sports Engineering
Cambridge, Massachusetts

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Director, Advanced Composite Materials and Textile Research Laboratory
University of Massachusetts
Lowell, Massachusetts

Robert D. Collier, Ph.D.
Consultant in Acoustics and Materials
Lebanon, New Hampshire

Timothy Mustone
Graduate School of Engineering
University of Massachusetts
Lowell, Massachusetts

Submitted to

William Murray
Executive Director of Baseball Operations
Major League Baseball
New York, New York

December 11, 1997

1. SUMMARY

1.1 Objectives

The four principle objectives of this study were to:

(1) conduct an independent evaluation of the BHM,

(2) establish bat testing procedures,

(3) compare hitting performance of specified wood and non-wood bats, and

(4) based on the acceptance of the BHM as a valid bat testing method and associated ball exit speed performance criteria, explore ways for the implementation of a license of a duplicate Baum system in an independent testing facility.

1.2 Executive Summary

After years of R&D, Steve Baum has designed and built a patent approved hitting machine for ball and bat testing at game pitching and bat swing speeds. The BHM is a unique controlled state-of-the-art measurement and analysis system with which an extensive database has been built over the past two years. These data demonstrate a high level of experimental accuracy and repeatability and provide realistic comparative measurements of ball exit velocity for both wood and non-wood, e.g. metal, bats.

This study, based on established engineering principles and methods, has been carried out in close cooperation with the NCAA through their designated technical contact, Professor Trey Crisco. The project has been carried out in a six-month period, April – September 1997 with preliminary results made available to the NCAA Baseball Rules Committee meeting in early July through Professor Crisco. On August 19, a presentation of results was given to Mr. William Murray (MLB) and Professor Crisco at the University of Massachusetts Lowell. An additional presentation was made to Mr. Ted Briedenthal of the NCAA, Mr. Brad Rumble of the NFHS and Mr. William Thurston of the NCAA Rules Committee on September 6.

The primary objectives have been met. The BHM measurement and analysis system has been evaluated. The accuracy has been determined through system and component calibrations as well as statistical analysis. The test configuration and test procedures ensure an accuracy of measured exit ball velocities within 1 mph on a precise hitting trajectory. The declutching of the servo drive before bat-ball impact, the 3-4 ms impulse travel time from impact to handle, and a bat-ball contact time on the order of 1 ms validate the hypothesis that the bat is essentially a free body during contact. The inertia of the machine does not influence the ball exit velocity.

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quantitative frequencies?
A Those -- the frequencies were actually tabulated through our baseball liaison and our research staff. My role basically was just to report those to the Baseball Summit.
Q So your role was to report tabulations of results from the survey rather than to consider the implications of those results for issues such as pitcher reaction time, is that correct?
MR. WIERENGA: Object to the form.
A The results were also shared with the Competitive Safeguards Committee that reviewed that information.
Q (By Mr. Ettinger) Let me -- I would like you to answer my question. You gave me an also, but never quite answered my question. My question is, was your role limited to tabulating the results of the Pitcher Hit by a Batted Ball Survey or did it also include considering the implications of those results for conclusions about pitcher reaction time --
MR. WIERENGA: Object --
Q (By Mr. Ettinger) -- or batted ball safety?
MR. WIERENGA: Object to the form.
A My role and the committee's role is always to

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assist the rules committee or a group that has an issue. In this case, it was a Rules Committee issue. They were used by myself and the Competitive Safeguards Committee as sounding boards on health and safety issues. So the committee considered this information.
Q (By Mr. Ettinger) Did you draw any implications in terms of bats safety from this Pitcher Hit by a Batted Ball Survey yourself?
A I don't recall drawing any implications.
Q Okay. Was the most common kind of conduct reflected in the Pitcher Hit by a Batted Ball Survey being hit in the foot?
MR. WIERENGA: Object to the form.
A I don't have the data in front of me, I don't know.
Q (By Mr. Ettinger) Okay. Now, I have seen a reference somewhere that suggests that there was an incident of hospitalization found through the survey. I have been through the forms and I couldn't find any incident where hospitalization was checked. I am just asking, do you recall having seen any examples of the filled out Pitcher Hit by a Batted Ball Survey where there was an incident of hospitalization?

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A The information that I saw was the final tabulated results. As I mentioned, I did not input the data into the computer, it was put in by the staff liaison for the Baseball Rules Committee and whatsoever they enlisted to perform that task.
Q Oh, so Mr. Breidenthal and his people put the data into the computer?
A Whoever he enlisted to do that. It was not my responsibility.
Q Did you ever review the individual filled out Pitcher Hit by a Batted Ball Survey forms?
A No.
Q This survey was limited to Division I schools, the Pitcher Hit by a Batted Ball Survey, is that right?
A That's correct.
(Dick Deposition Exhibit Number 128 is marked for identification.)
Q (By Mr. Ettinger) The witness has before him Exhibit 128, which is document numbers NCAA 100194 through NCAA 100196, a document that says Frequencies in the upper left. It says Overall in handwriting in the upper right and has various tables in it. Did you prepare this document?
A I did not.

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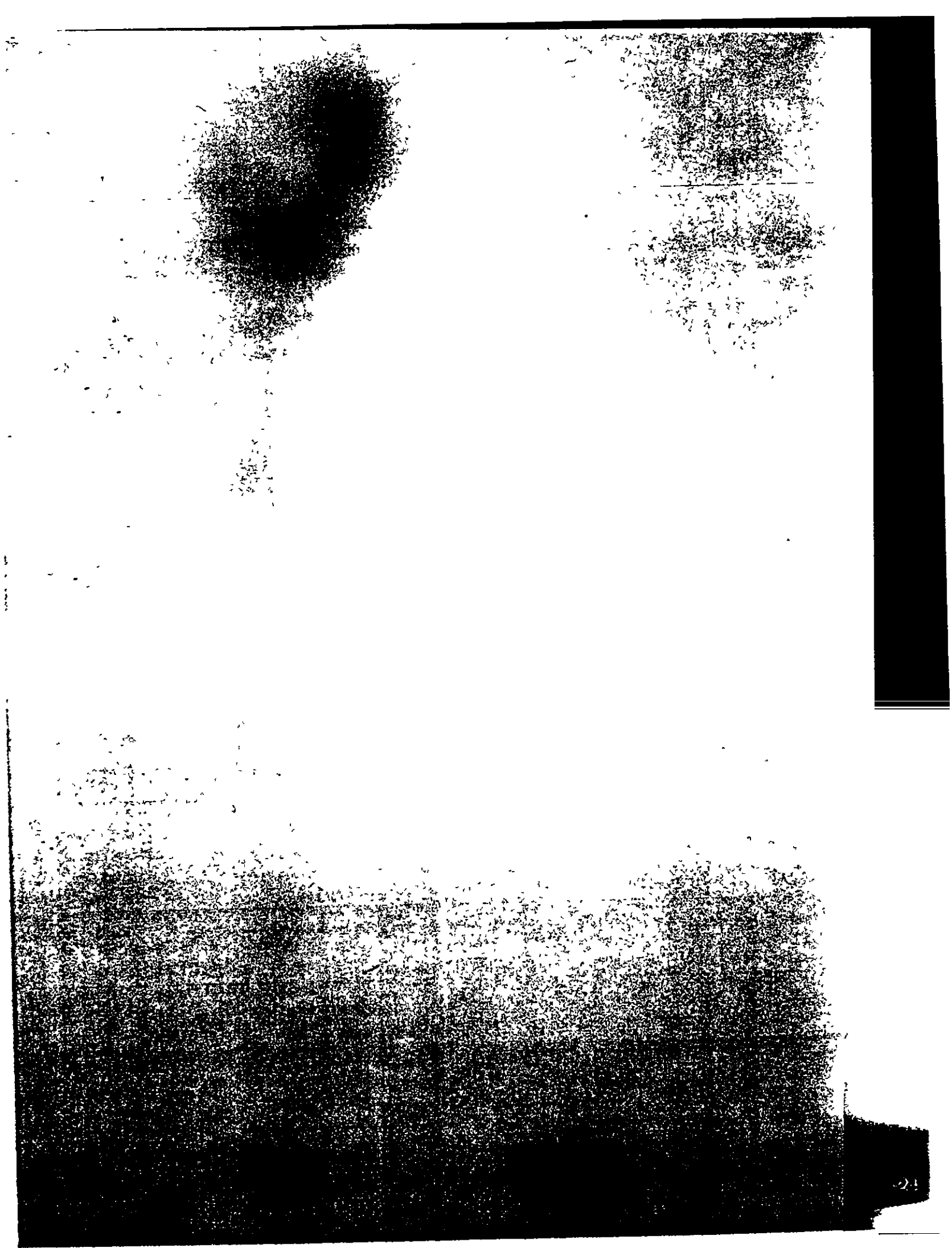
Q Have you seen this document?
A I have.
Q Who prepared it?
A The -- our research staff.
Q When you say our research staff --
A NCAA national office research staff.
Q Can you give me any names?
A The director of the research staff is Todd Petr, P-e-t-r.
MR. ROMANO: Can you spell the last name, please?
THE WITNESS: P-e-t-r.
Q (By Mr. Ettinger) So did Mr. Petr supervise the preparation of this data or not?
A This was a project that was developed through Dr. -- Ted Breidenthal. I don't know --
Q Is this, in fact, a tabulation of the results of the Pitcher Hit by a Batted Ball Survey?
MR. WIERENGA: Object to the form.
A It is my understanding, yes.
Q (By Mr. Ettinger) Does it also the follow -- the results of the follow-up telephone survey as well?
MR. WIERENGA: Same objection.
A It does not include the results of the follow-up telephone survey.



BASEBALL BAT ANTITRUST -vs-

NCAA

RANDALL W. DICK

MAY 20, 1999

BOWEN MOTTER REPORTING - (816) 421-2876

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF KANSAS

IN RE BASEBALL BAT ANTITRUST LITIGATION,

Plaintiffs,

-vs-

No. 98-MC-1249

NATIONAL COLLEGIATE ATHLETIC ASSOCIATION, et al.,

Defendants.

THE DEPOSITION OF RANDALL W. DICK, produced, sworn and examined on behalf of Easton Sports, pursuant to Notice, between the hours of eight o'clock in the forenoon and six o'clock in the afternoon of Thursday, May 20, 1999, at the Law offices of Polsinelli, White, Vardeman & Shalton, P.C., 700 West 47th Street, Suite 1000, in the City of Kansas City, in the County of Jackson, and State of Missouri, before me,

SHEILA A. MENTZER
of
BOWEN MOTTER REPORTING

a Notary Public, in a certain cause now pending in the United States District Court for the District of Kansas, In Re Baseball Bat Antitrust Litigation, Plaintiffs, vs. National Collegiate Athletic Association, et al., Defendants.

Appearances

For the NCAA: Miller, Canfield, Paddock & Stone, P.L.C.
101 North Main
Ann Arbor, Michigan 48133
By Mr. Robert Wiarenga

For Easton Sports: Honigman Miller Schwartz & Cohn
2290 First National Building
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Detroit, Michigan 48226-3583

Appearances (Cont'd)

For Steve Dunn and Dunn Research & Development: Jenkens & Gilchrist, P.C.
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By Mr. Salvatore A. Romano
and
Sommers, Schwartz, Silver & Schwartz, P.C.
2000 Town Center
Suite 900
Southfield, Michigan 48075
By Mr. David L. Belyea

For Hillerich and Bradsby Company (by phone): Greenebaum, Doll & McDonald, P.L.L.C.
3300 National City Tower
101 South Fifth Street
Louisville, Kentucky 40202
By Ms. Christie A. Moore

Also Present: Mr. John Cramer
Vice President, General Counsel
Easton Sports, Inc.
7855 Haskell Avenue
Van Nuys, California 91406

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RANDALL W. DICK,

a Witness, of lawful age, being produced, sworn and examined on behalf of Easton Sports, deposeth and saith:

MR. ETTINGER: This is the deposition of Randall Dick taken pursuant to the Federal Rules of Civil Procedure.

DIRECT EXAMINATION

By MR. ETTINGER:

Q. Mr. Dick, could you state your full name for the record, please?
A. Randall Watson Dick.
Q. And what is your occupation?
A. I am the assistant director of sports sciences at the NCAA.
Q. How long have you held that position?
A. I started in 1987.
Q. You have been assistant director of sports sciences since that time?
A. Right. I was recently named senior assistant director last year.
Q. Who is the director of sports sciences?
A. Frank Uryasz.
Q. How do you spell that?
A. U-r-y-a-s-z.

Q. How long has he had that position?
A. I believe since about 1985.
Q. Do you report to him?
A. I do.
Q. Okay. How many other people -- well, who reports to you, if anyone?
A. My administrative assistant and currently two individuals that input data for the Injury Surveillance System.
Q. Could you describe your responsibilities today in your position? Today, not literally today, but at this general time?
A. The NCAA sports sciences consists of drug testing and drug education, as well as other issues that sort of evolve and relate to sports medicine outside of that. And in a nutshell, Mr. Uryasz oversees the drug testing and drug education components of sports science and my responsibilities are to -- to oversee and coordinate the activities that relate to sports science, other than drug testing and drug education.
Q. And can you summarize what those other issues are?
A. It's just related to health safety, welfare of the student athlete. I am also the secondary liaison

to the Committee on Competitive Safeguards and Medical Aspects of Sports.
Q. We are going to be talking about that committee and the name is so long, can we call it the -- do you have a shorthand term you use for it?
A. Competitive Safeguards Committee.
Q. That is exactly what I was going to suggest. You say the secondary liaison. What does that entail?
A. Mr. Uryasz is the primary liaison. And there are two liaisons. So this -- he has the number one responsibility for all those activities and I assist him.
Q. Okay. So there is no division along topic lines like there is with -- like you described with regard to drugs versus other matters in terms of the committee?
A. The committee has two -- is broken down into two subcommittees, one is drug testing and drug education, the other is sports science safety. So when we are in our different subcommittee meetings, I am the liaison with the sports science safety group and Mr. Uryasz is the liaison with the drug testing and drug education group.
Q. Okay. And in terms of what you have described as the areas that you are and are not responsible

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MR. WIERENGA: Okay.
(A short break is taken and the following further proceedings are had.)
Q (By Mr. Ettinger) In 19 -- for the 1998 season, there was an additional survey done with regard to batted balls, is that right, Mr. Dick?
A Yes.
Q Whose idea was it to do that survey?
A Baseball Rules Committee.
Q Who came to you and communicated this desire?
A I don't remember. Probably our staff liaison for baseball rules.
Q Mr. Breidenthal?
A I believe so, yes.
Q What did he say to you?
A I don't recall. I mean, there was an issue, the committee wanted to do a particular survey and we discussed it. I don't remember the particulars.
Q Do you remember anything about the discussion on that subject?
MR. WIERENGA: Objection, asked and answered.
A I don't. I deal with 16 different sports. I don't remember the specifics on it.
Q (By Mr. Ettinger) Do you remember any reason

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being given as to why they wanted to do this survey?
MR. WIERENGA: Same objection.
A It is my sense that the Baseball Rules Committee was concerned with their perception of frequency of pitchers impacted with the batted ball. And were interested in getting more specific detail for that particular mechanism of injury.
Q (By Mr. Ettinger) You say it is your sense. Do you recall what anyone actually said to you on that subject one way or the other?
MR. WIERENGA: Objection, asked and answered.
A I already said I don't recall the specifics of it.
Q (By Mr. Ettinger) Before we get to that, actually, was this -- this survey that was done was sent out by Mr. Thurston, is that correct?
MR. WIERENGA. Object to the form.
A The survey instrument was sent out by the NCAA with a cover letter from the Baseball Rules Committee explaining its purpose.
Q (By Mr. Ettinger) From the Baseball Rules Committee?
A Correct.
(Dick Deposition Exhibit Number 126 is

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marked for identification.)
Q (By Mr. Ettinger) I have handed the witness what has been marked as Exhibit 126, a document numbered NCAA 100200, a January 12, 1998 memo to Division I Athletic Trainers from Bill Thurston, NCAA Baseball Rules Editor. Is this the cover letter you just referred to?
A I believe so, yes.
Q Okay. Do you know why this went out from Mr. Thurston?
A I have -- I am not sure on what the different responsibilities are for the Baseball Rules Committee.
Q Do you have any idea about what positions Mr. Thurston has taken on the issue of baseball bats and batted ball injuries?
MR. WIERENGA: Object to the form.
A I have heard that he is concerned about the issue.
Q (By Mr. Ettinger) Are you aware that he is well-known in the baseball community as someone who advocates restrictions on baseball bats?
MR. WIERENGA: Object to the form and the characterization.
A I am aware of that, yes.
Q (By Mr. Ettinger) Did you consider -- did you

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have any input into the -- the identity of the person who would be sending out the cover letter or the form of the cover letter?
A As I mentioned before, this was a project that was developed by the Baseball Rules Committee.
Q So did you have any -- my question is, did you have any input into who would be sending out the cover letter or the form of the cover letter?
A No, I did not.
Q And did you consider whether this going out under Mr. Thurston's signature might create some bias in terms of who would be interested in responding?
A No, I did not.
MR. WIERENGA: Objection.
(Dick Deposition Exhibit Number 127 is marked for identification.)
Q (By Mr. Ettinger) The witness now has Exhibit 127. Can you identify that document, Mr. Dick?
A This appears to be the Pitcher Hit by a Batted Ball injury form that was distributed to Division I athletic trainers.
Q This is the survey that the Baseball Rules Committee wanted done, this is the form for that, is that right?
A Yes.

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Q That is a yes?
A Yes.
Who prepared this form?
A It was a joint effort between Baseball Rules, the staff liaison for Baseball Rules, myself.
Q Now, one thing is that this form does not -- requires reporting of any contact between the pitcher and a batted ball, isn't that right?
A That is incorrect. It requires any contact between a pitcher and batted ball as -- where the pitcher did not have an ability to react to the ball.
Q Okay. But this is not restricted to injuries, it is any contact under that description, isn't that right?
A That is correct.
Q So the word -- use of the word injury in the title a misnomer, is it not?
MR. WIERENGA: Object to the form.
MR. ROMANO: I am going to object to the form of the question.
MR. WIERENGA: Well, the document speaks for itself.
A It could be interpreted in whatever way you want to interpret it.

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Q (By Mr. Ettinger) Now, this was --
MS. MOORE: If I may interrupt. Could we go back and read me back the question and answer? There was a -- some outside noise and I missed the entire question and answer.
(The last question and answer are read by the reporter.)
Q (By Mr. Ettinger) Now, this -- the idea was that this questionnaire would be filled out by the trainer, is that right?
MR. WIERENGA: Object to the form.
A It was mailed to head athletic trainer for baseball at each NCAA member institution.
Q (By Mr. Ettinger) Now, do you know whether the trainer would typically be in a position to know whether a pitcher was unable to react to a ball when he was hit?
MR. WIERENGA: Object to the form.
A The -- we provide criteria for reporting in the same way as we provide criteria for reporting an injury. We provide them as much information as we can in order to make an appropriate decision.
(By Mr. Ettinger) Well, the question of whether a pitcher is unable to react to a ball is a -- requires some judgment, does it not?

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MR. WIERENGA: Object to the form.
A The specific instances that are on the form that are reported are if it is deflected by a pitcher's glove and does not contact the body. It also talks about contacting the body as a result of a bad hop as opposed to an inability to react. That part may be somewhat subjective.
Q (By Mr. Ettinger) Okay. And on the ISS questionnaire, you have an objective definition of injury, do you not?
MR. ROMANO: I object to the form of the question.
MR. WIERENGA: As do I.
A There is a definition of injury, correct.
Q (By Mr. Ettinger) And that is an objective one that can be clearly answered yes or no, isn't that right?
MR. ROMANO: Object to the form of the question.
MR. WIERENGA: And I second the objection.
A I also believe that the subjectiveness -- maybe there is some subjective nature of that form also.
Q (By Mr. Ettinger) Well, the issue of whether someone didn't play the next day is objective, isn't that right?
MR. WIERENGA: Object to the form.
A The definition is if somebody is unable to perform at the level, they had a restriction in performance.
Q (By Mr. Ettinger) Well, it doesn't say unable to perform. On the ISS questionnaire, it says, "Results in any restriction in participation or performance," isn't that right?
A That's correct.
Q And that would mean didn't play or played less, wouldn't it?
MR. WIERENGA: Objection, calls for speculation.
MR. ROMANO: Object to the form of the question. Argumentative at this point.
MR. ETTINGER: Now, these objections are speaking objections and they are inappropriate under Judge Vratil's instructions. And if you want to object as to form, you can do it. And that is all you are supposed to do under her rules.
MR ROMANO I disagree with you. When you get -- when you get argumentative, I can say argumentative, absolutely, under her instructions.

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question.
A The measures -- there are two measures of severity. They don't specifically mention days in terms of time loss. Potentially, if you are hospitalized, there might be some inference there about how long you might have been out.
Q (By Mr. Ettinger) People are often hospitalized for one or two or three days, are they not?
A They are often hospitalized for more also.
Q All right. So the short answer is you can't tell from how this form is filled out whether or not someone was out or seven days or more, can you?
MR. WIERENGA: I object to the form of the question as vague and ambiguous.
MR. ROMANO: This form in particular is not filled out? Or are you talking about the forms that are actually --
A I am saying you can infer many things.
Q (By Mr. Ettinger) My question is -- we can take out a whole stack of the forms if it will help you to look at them. My question is -- I gather -- let me put it this way. I gather if it says no time loss, you know that it was less than seven days, right?
A Yes.

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Q Let me just put it to you this way. If you took all the filled out questionnaires from the Pitcher Hit by a Batted Ball Survey, would you be able to tabulate how many players were out for seven days or more?
A Not exactly, no.
Q Would you be able to do it plus or minus fifty percent?
A You may be able to.
Q How would you do that?
MR. WIERENGA: Try to pause for a second. I object to the form.
Q (By Mr. Ettinger) How would you do that?
A I wouldn't do it. But people infer information in many different ways.
Q Do you know how one could do it?
A I do not, no.
Q Okay. And am I correct that the Pitcher Hit by a Batted Ball Survey form was sent out once at the beginning of the season to the various schools and they were asked to send in a completed form whenever there was an incident of a pitcher being struck by a batted ball?
MR. WIERENGA: Object to the form.
A Repeat it again.

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Q (By Mr. Ettinger) Is it the case that the form was sent out once to the trainers at Division I schools and they were asked to respond whenever an incident occurred that met the criteria on the form?
MR. WIERENGA: Same objection.
A A set of forms was sent out to each individual athletic trainer and the directions are on the form about how to complete it.
Q (By Mr. Ettinger) But there was -- there was no weekly form sent out or monthly form sent out to the trainers, was there?
A It was sent out one time.
Q Did you make any effort to analyze the completed surveys to determine under what circumstances they really reflected an issue arising from pitcher reaction time or did you see that as outside of your area?
MR. WIERENGA: Object to the form. Which surveys are you asking about?
Q (By Mr. Ettinger) The completed surveys of the Pitcher Hit by a Batted Ball.
A Repeat the question.
Q Did you make any effort to go through the individual responses to the Pitcher Hit by a

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Batted Ball Survey to determine which instances related to inadequate reaction time as opposed to some other issue or was that outside of your area?
A I don't recall making any kind of analysis of that.
Q Okay. So if, for example, a completed form showed that a pitcher was hit in the rear end by a batted ball, apparently because he was facing away, as is the case in several of these, you would not have done any particular analysis as to what that meant or didn't mean in terms of the results of the survey, is that right?
MR. WIERENGA: Object to the form, asked and answered.
MR ROMANO: I will object to the form, too.
A The survey was produced and the information was shared with the Baseball Rules Committee.
Q (By Mr. Ettinger) Okay. Did you attempt to do any analysis yourself as to the implications of the survey results or not?
MR. WIERENGA: Object to the form.
A I was asked to produce information on the results for the Baseball Summit.
Q (By Mr. Ettinger) Information meaning

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quantitative frequencies?
A Those -- the frequencies were actually tabulated through our baseball liaison and our research staff. My role basically was just to report those to the Baseball Summit.
Q So your role was to report tabulations of results from the survey rather than to consider the implications of those results for issues such as pitcher reaction time, is that correct?
MR. WIERENGA: Object to the form.
A The results were also shared with the Competitive Safeguards Committee that reviewed that information.
Q (By Mr. Ettinger) Let me -- I would like you to answer my question. You gave me an also, but never quite answered my question. My question is, was your role limited to tabulating the results of the Pitcher Hit by a Batted Ball Survey or did it also include considering the implications of those results for conclusions about pitcher reaction time --
MR. WIERENGA: Object --
Q (By Mr. Ettinger) -- or batted ball safety?
MR. WIERENGA: Object to the form.
A My role and the committee's role is always to

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assist the rules committee or a group that has an issue. In this case, it was a Rules Committee issue. They were used by myself and the Competitive Safeguards Committee as sounding boards on health and safety issues. So the committee considered this information.
Q (By Mr. Ettinger) Did you draw any implications in terms of bats safety from this Pitcher Hit by a Batted Ball Survey yourself?
A I don't recall drawing any implications.
Q Okay. Was the most common kind of conduct reflected in the Pitcher Hit by a Batted Ball Survey being hit in the foot?
MR. WIERENGA: Object to the form.
A I don't have the data in front of me, I don't know.
Q (By Mr. Ettinger) Okay. Now, I have seen a reference somewhere that suggests that there was an incident of hospitalization found through the survey. I have been through the forms and I couldn't find any incident where hospitalization was checked. I am just asking, do you recall having seen any examples of the filled out Pitcher Hit by a Batted Ball Survey where there was an incident of hospitalization?

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Q Oh, so Mr. Breidenthal and his people put the data into the computer?
A Whoever he enlisted to do that. It was not my responsibility.
Q Did you ever review the individual filled out Pitcher Hit by a Batted Ball Survey forms?
A No.
Q This survey was limited to Division I schools, the Pitcher Hit by a Batted Ball Survey, is that right?
A That's correct.
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Q Have you seen this document?
A I have.
Q Who prepared it?
A The -- our research staff.
Q When you say our research staff --
A NCAA national office research staff.
Q Can you give me any names?
A The director of the research staff is Todd Petr, P-e-t-r.
MR. ROMANO: Can you spell the last name, please?
THE WITNESS: P-e-t-r.
Q (By Mr. Ettinger) So did Mr. Petr supervise the preparation of this data or not?
A This was a project that was developed through Dr. -- Ted Breidenthal. I don't know --
Q Is this, in fact, a tabulation of the results of the Pitcher Hit by a Batted Ball Survey?
MR. WIERENGA: Object to the form.
A It is my understanding, yes.
Q (By Mr. Ettinger) Does it also the follow -- the results of the follow-up telephone survey as well?
MR. WIERENGA: Same objection.
A It does not include the results of the follow-up telephone survey.

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Q What did you talk about?
A The move to Indianapolis.
Q Are you friendly with Ted?
A I know Ted, I have worked with Ted.
Q Have you socialized with Ted?
A No. Well, let me back up. How do you define socialize?
Q Go out to dinner with him, go out to lunch with him?
A I don't ever recall going out to dinner or lunch with him.
(A discussion is had off the record and the following further proceedings are had.)
Q (By Mr. Romano) Are you -- have you ever had a discussion with Mr. Breidenthal about his concerns or about baseball bat injuries from high performance aluminum bats?
A Ted was the base -- the staff liaison to the Baseball Rules Committee for many years. During that role and as my role with Competitive Safeguards, issues that were of a concern to the Baseball Rules Committee were passed on to me to pass to Competitive Safeguards, so --
Q So he didn't -- I'm sorry.
A -- in that context, I would have had conversations

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with him on a variety of issues related to baseball.
Q Are you familiar with the fact that that concern has been a concern that has been going on for years?
MR. WIERENGA: Object to the form.
A What concern?
Q (By Mr. Romano) In other words, that -- that the baseball committee was considering or concerned with batted ball injuries?
A As -- as I believe I have mentioned, my role within Injury Surveillance is to interact with the different rules committees. And I was -- I mean, there was discussions that have happened from the Baseball Rules Committee that have been sent to Competitive Safeguards on a variety of issues. I understand that the baseball bat is one of them, yes.
Q Has that been a concern that has gone back for many years? I mean, like ten years at least?
MR. WIERENGA: Objection, asked and answered.
I am not sure I recall when that concern was initially brought to the -- my attention or the Competitive Safeguards Committee.

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Q (By Mr. Romano) Do you have any -- I mean, based on your -- your participation as an NCAA employee and a staff member, have you ever heard any scuttlebutt as to why the NCAA has not taken any action with respect to high performance aluminum bats and injuries prior to July of 1998?
MR. WIERENGA: Object to the form.
A No.
MR. ROMANO. I don't have any further questions at this point.
MR. ETTINGER: Christie.
MR. WIERENGA: Christie.
MS. MOORE: Yes.
MR. WIERENGA: You are up.
MS. MOORE: Okay. I just need to put it in front of the record that H&B does have -- wants to reserve its right to recall this witness. We have an objection to having received two boxes of documents regarding Mr. Dick yesterday, late morning. So we have had not even a full business day to review. Aside from that objection and reservation of rights, I don't have any questions at this point of Mr. Dick.
MR. ETTINGER: Okay. I just have a few follow-ups, so don't get up too fast.

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REDIRECT EXAMINATION
By MR. ETTINGER:
Q Mr. Dick, the Committee on Competitive Safeguards that I asked you about and then Mr. Romano asked you some questions about, did that committee ever endorse any particular rule regarding baseball bats or any particular restriction regarding baseball bats, to the best of your recollection?
A If they did, it would be reflected in the minutes. I don't recall it specifically.
Q I didn't see it in the minutes, that is why I wanted to ask your recollection.
Going back real briefly to Exhibit 27, the Pitcher Hit by a Batted Ball Survey.
MR. ROMANO: 127?
MR. ETTINGER: 127.
Q (By Mr. Ettinger) Have you got that? Just -- there were various questions back and forth about what is covered by this. I just want to give you an example. Is it correct that if a pitcher, for example, was hit in the shin by a batted ball, didn't even complain about it, kept on pitching, never took any time off, never got any medical attention, that would be a reportable incident on this form, isn't that correct?

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MR. WIERENGA Object --
MR. ROMANO: Did you say hit on the shin?
MR. ETTINGER: Hit on the shin.
MR. WIERENGA: As I said, I object to the form. Go ahead.
MR. ROMANO: Shin?
A The purpose was to quantify the number of Division I pitchers struck by hard hit batted balls. So it sounds like the scenario you gave falls into that I am quite sure.
Q (By Mr. Ettinger) Okay. The follow-up telephone survey of the 30 schools that I asked about, Mr. Romano asked about, that was conducted after the end of the 1998 baseball season, is that right?
A It is -- I don't recall exactly when that survey was conducted.
Q Okay. One question on Exhibit 143 that Mr. Romano showed you. Got that?
A I do.
Q There were a number of questions about what parts you wrote and what parts you provided information on. And I got an impression, and then it was a little unclear, that you may have contributed to

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the writing of the second paragraph on Page 2, even though the information did not originally come from you, is that correct?
A My recollection of that paragraph is that information had already -- was already somewhere and it was being incorporated into this whole scenario. It was -- as you have asked me before, the numbers of -- where all these numbers came from is not something that I generated.
Q I understand that part. The part I was a little unclear on is did you, in fact, write a draft of this paragraph or language that ended up in this paragraph?
A I believe there might have been parts of it that were in that paragraph. But again, I think it was taken from some documents from somewhere else.
Q You may have written some of this description about ball velocity and reaction time, taking it from somebody else, as you described, with regard to an earlier document, is that right?
A I believe that is correct, yeah.
Q And the same answers would apply as to the earlier document in terms of your level of knowledge of these facts?
A That's correct. That paragraph, I think, is about

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the same.
Q Has Dr. Smith ever expressed any views that you have heard on pro or con bat -- particular bat restrictions?
MR. WIERENGA: Object to the form.
A Not -- none that I can specifically recall. He's -- I mean, we have had discussions as a matter of the record. We meaning the committee.
Q (By Mr. Ettinger) Right. Has he expressed any views, as far as you can recall, about the need for restrictions of some kind on bats or not?
MR. WIERENGA: Objection, asked and answered.
A Not as I can recall.
Q (By Mr. Ettinger) Okay. Just one more, I think. These questions Mr. Romano just made to you about the computer system and so on, Exhibit 147. That is the context, I am not asking you in specific about the exhibit. But you made a reference to the computer system being modified and that created some efficiency concerns and those being taken care of. When did this modification occur?
A I believe '97. I may not be right on that.
Q And was that part of the reason why some of these analyses we discussed earlier were done by people

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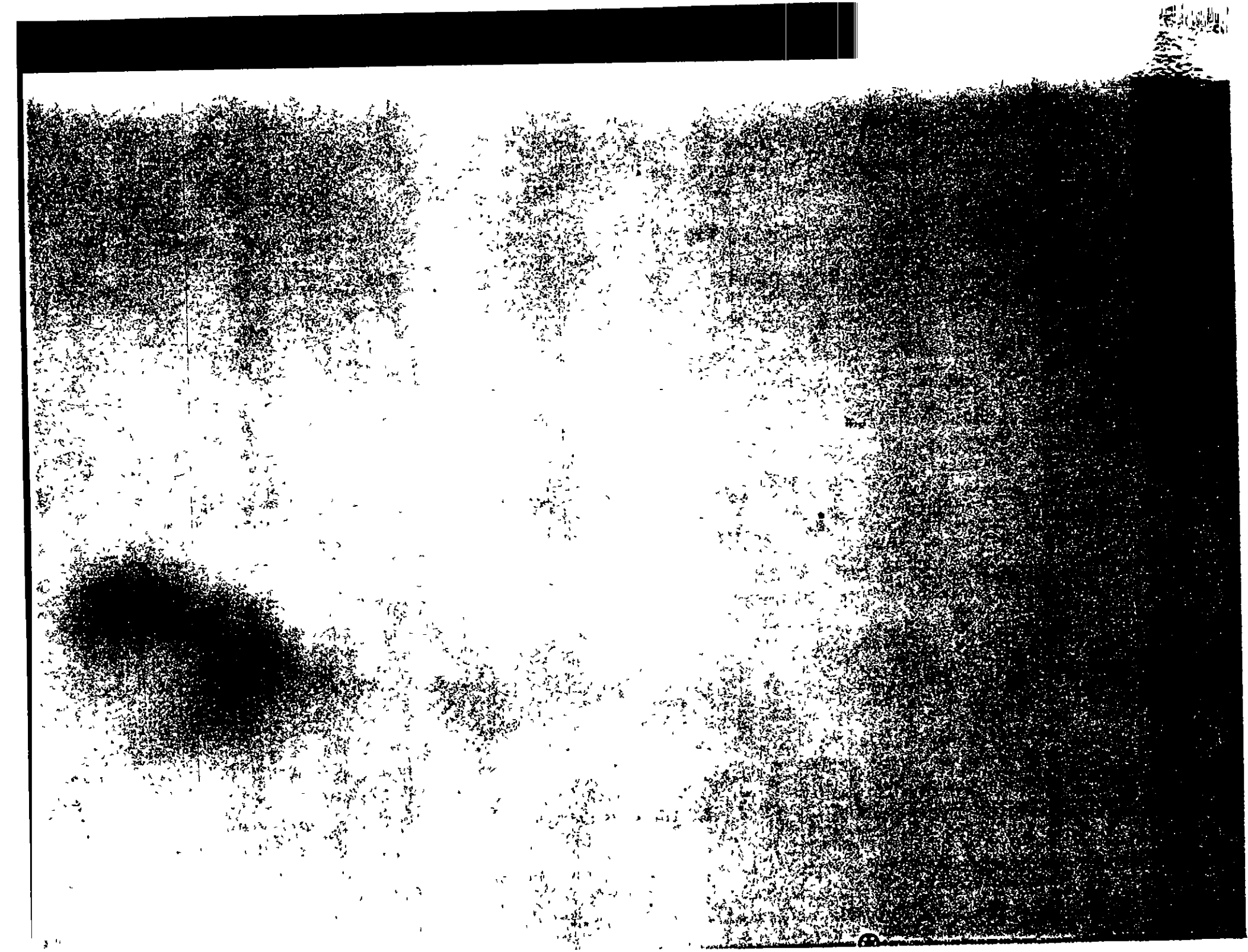
other than you?
A No.
Q No? Since that computer modification has occurred, has the ISS system proceeded in exactly the same way -- let me state this another way.
Did the computer modification require the NCAA to restrict or curtail in any way its ISS system?
MR. WIERENGA: Object to the form.
A The limitation that -- again, I will emphasize, the data, I don't think -- the data were not in question. The problems we had was the export of the final results. We could get them, but we didn't have an efficient way of generating them to produce the reports that you have here.
Q (By Mr. Ettinger) Nevertheless, even if it was a little less efficient you ended up producing the reports as you always had, is that right?
A Yes.
MR. ETTINGER: Nothing further.
MR. WIERENGA: I have no questions. Okay.
MR. NELSON: Christie, any more?
MS. MOORE: No.
(Witness excused.)



Pitcher Hit By a Batted Ball Injury Survey

Reporting Institution _____ Division _____ Date of Injury _____

Name _____ Institutional Position _____ (e.g., athletic trainer, coach)

Contact Phone Number _____

PURPOSE: To quantify the number of Division I pitchers struck by hard-hit batted balls. Every Division I baseball program has been asked to participate in this study, which has been recommended by the NCAA Baseball Rules Committee and endorsed by the College/University Athletic Trainers Committee.

DIRECTIONS: Please complete this form each time your pitcher is struck by a batted ball. There is no minimum injury criteria; if the pitcher is unable to react to the ball and is hit, the incident should be reported. Please:

- Fill out a separate report for each occurrence.
- Circle the single best answer for each question.

Do not report batted balls that:

- Are deflected by the pitcher's glove and do not contact the body.
- Contact the body as a result of a bad hop vs. an inability to react.

I. Injury occurred during:

A. Practice
   1. Batting Practice
   2. Scrimmage
   3. Pregame batting practice

B. Game
   1. Day game
   2. Night game

Pitcher was hit by a ball off:

A. An aluminum bat
B. A wood bat
C. A composite bat
D. Other _____

III. Pitcher was hit by a:

A. Direct line drive
B. One-hop ground ball
C. Other _____

IV. Severity (time loss):

A. No time loss
B. Left game or practice
C. Missed next practice
D. Missed next start or game
E. Other _____

V. Severity (medical attention):

A. No medical attention
B. Medical attention (athletic trainer)
C. Medical attention (physician)
D. Hospitalization
E. Surgery
F. Other _____

VI. Body area injured as a result of ball impact:

A. Face or head (specific area) _____
B. Neck
C. Upper extremity (specific area) _____
D. Torso (specific area) _____
E. Lower extremity (specific area) _____
F. Other _____

VII. Type of injury:

A. Fracture
B. Concussion
C. Contusion
D. Laceration
E. Dislocation
F. Other _____

Thank you for your cooperation. Please return all forms and forward any questions to:

Mr. Randy Dick, Assistant Director of Sports Sciences
NCAA
6201 College Blvd.
Overland Park, KS 66211-2422
(913) 339-1906

NCAA 100190

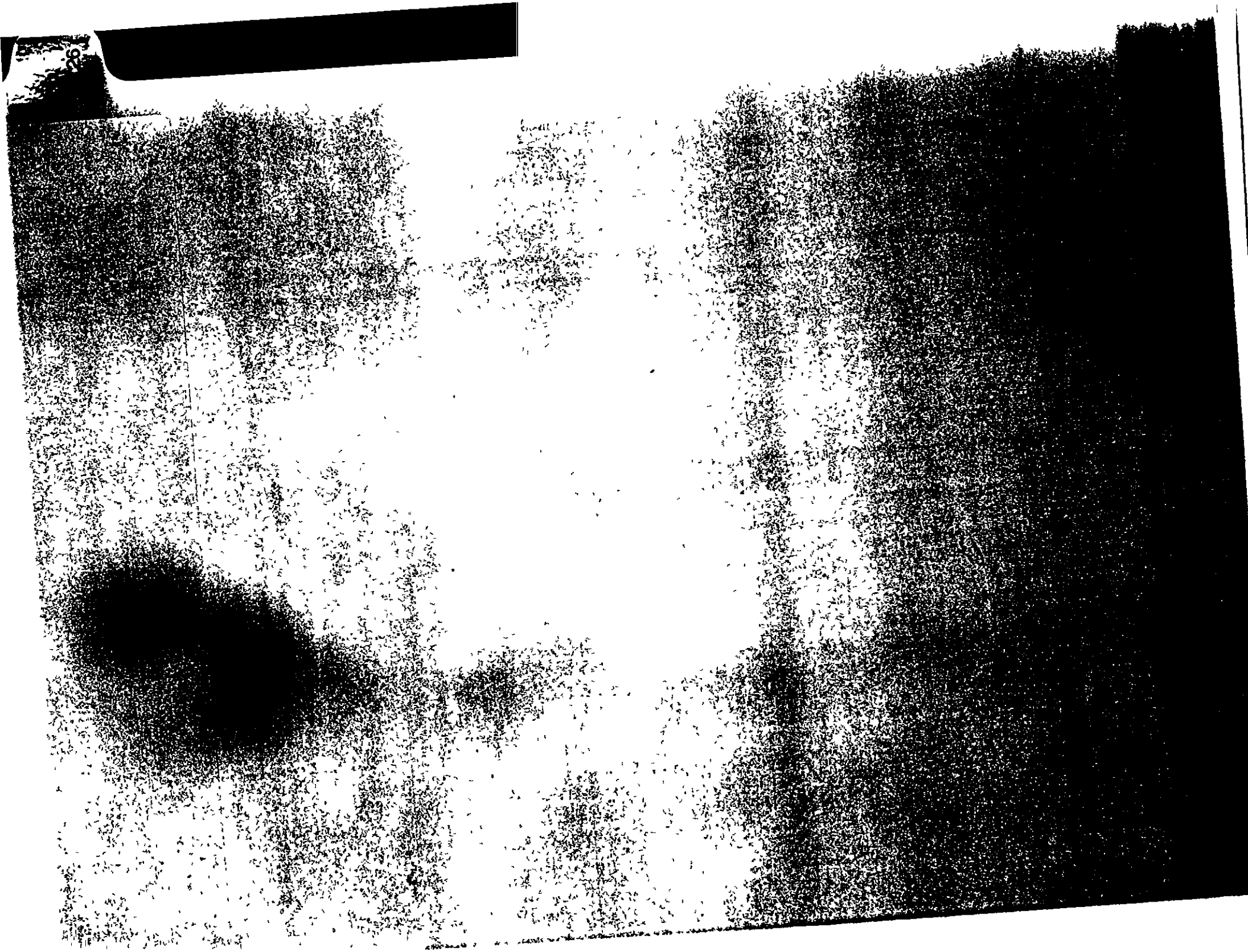


Exhibit 2.1

Compilation of Selected News Accounts of Injuries From Baseballs Hit Off Of Metal Bats

	NCAA Description of Incidents	Occurred	Source & Date	Incident Research
1	Fifteen year old hit above temple by ball batted by 5'10", 140 pound boy; skull fracture/bleeding in brain numbness on left side	May 28,1998	Austin American/Statesman; The Seattle Times;6/26/98	Player has made full recovery & is playing soccer, basketball and going back to baseball in spring.
2	Three pitchers hit by batted balls in one tournament; Florida State pitcher suffered 5-inch gash/27 stitches	May-98	St. Petersburg Times;6/12/98	St. Petersburg Times archives has not been able to locate such an article for that date. Mike Martin, coach of Florida State, has no knowledge of such an incident.
3	Nine-year old Little Leaguer struck by ball that hit the mound and shot straight into his mouth;almost lost his two front teeth	Before June 7, 1998	AP Online, 6/7/98	This had nothing to do with reaction time - it was a bad bounce to a nine year old.
4	Fourteen year old hit in temple; death	Pre-Summer 1998	Article stated 14 yr. old Pony Leaguer was killed in Utica, N.Y. by a ball hit off a metal bat. The Gonzaga Bulletin; Summer 1998	President of Pony Baseball, Abe Key, says they have no record of such an incident and they do not have a Pony League in Utica, NY. Creighton Hale of Little League has no information on any incident of this nature.
5	Australian Baseball League pitcher hit by ball;underwent surgery to place 11 metal plates and 22 screws in head	Spring, 1998	The Time-Picayune;5/13/98	Pitcher is playing every day and recovered 100%. This is professional baseball in Australia
6	Arizona State pitcher hit in face;broken jaw	February, '96	The Time-Picayune;5/13/98	Ryan Mills - Pitched for Arizona State & was #1 draft pick of the Minnesota Twins in 1998
7	Seventeen year old hit in temple; brain dead/dies; possible ball caromed off concrete curb surrounding cage.	June 22,1997	Austin American-Statesman; Los Angeles Times;8/2/98; USA Today;5/25/97	Confirmed that ball careened off concrete curb. Had nothing to do with the bat.
8	High school coach hit in head while pitching, irreversible brain damage, hospitalized three months, in wheelchair	May 12,1997	The Charlotte Observer; 7/19/97	Assistant Baseball Coach pitches from a distance of approximately 45' instead of appropriate distance of 60'6". He's using a pitching screen but doesn't get behind it in time.

Exhibit 2.1

Compilation of Selected News Accounts of Injuries From Baseballs Hit Off Of Metal Bats

	NCAA Description of Incidents	Occurred	Source & Date	Incident Research
9	High school pitcher hit over ear, brain bruise/temporary hearing loss;ended season and prospective college football career	April 22,1997	The Spokesman Review; 4/24/97	Player has completely recovered.
10	University of Houston pitcher hit in the face;loses two teeth/two other teeth were knocked around in mouth/60+ stitches	Mar 23,1996	The Time-Picayune;5/13/98 The New York Times;6/23/98	Player pitched the following weekend after the incident. Is now pitching in the Pittsburgh Pirates organization
11	Coach hit on side of his cheekbone;cracked orbital rim/eye swelled shut and bled; pitching indoor batting practice behind a screen	Spring 1996	The Spokesman-Review; 4/24/97	Baseball coach conducting indoor batting practice when batted ball went through hole in protective screen netting.
12	High school player struck on the temple;severe concussion/subdermal hematoma/extreme pain/unable to see/vomit/postconcussion syndrome;behind screen	Spring 1995	The Washington Post; 5/15/96	Third baseman is working with instructor at complex. He pitches to instructor and does not get behind protective screen.
13	Sixteen-year-old second baseman struck in the chest on a bounce grounder;sent him into cardiac arrest/revived by electric shock/regained consciousness two days later.	May 24,1994	The Buffalo News;6/5/94	A bounce grounder takes an odd hop as it hits infield grass and hits second baseman's chest. Not a reaction time issue - ball took a bad bounce.
14	Coach hit in head during batting practice;in critical condition	Mid-March 1994	St. Petersburg Times;3/19/94	Coach pitching at a distance of 46' using a protective screen. When contacted, he said he was watching the hitter's hands and did not get behind the screen. He has fully recovered.

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